Vishvavallabha

(Dear to the World : The Science of Plant Life)

Agri-History Bulletin No.5

Asian Agri-History Foundation

vishvavallabha

(Dear to the World: The Science of Plant Life)

Translated
by
Nalini Sadhale

Commentaries
by
Nalini Sadhale and Y L Nene

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About the Translator

Dr Nalini Sadhale obtained MA in Sanskrit with distinction from the University of Poona, Pune, India and PhD in Sanskrit from Osmania University, Hyderabad, India. She has had a distinguished professional career and she retired in 1994 as Professor and Head of the Department of Sanskirt, Osmania University, Hyderabad. She distinguished herself by serving on several prestigious organizations, committees, and boards. She worked as Sastra Chudamani Scholar of the Rashtriya Sanskrit Samsthan, New Delhi, India. She has several publications which include Katha in Sanskrit Poetics, Sanskrit Verse Translation of Hindi Tulasiramayana, and Translations of Urvashi and Vasantsena from Sanskrit to Marathi, Sitajosyam, from Telugu to Marathi and Surapala's Vrikshayurveda and Krishi-Parashara from Sanskrit to English. She was recently honored by the Asian Agri-History Foundation with the AAHF Gold Medal-2002 for her significant contributions to the Indian agricultural heritage.

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Foreword

The Asian Agri-History Foundation (AAHF), a non-profit trust, was established and registered in 1994 in Secunderabad, India, to facilitate dissemination of information on agricultural heritage to promote research on sustainable agriculture in South and Southeast Asian regions. These regions provided food security to its population for several millennia, with occasional famines that too in limited pockets, primarily due to drought. Farmers here had evolved some of the most sustainable agricultural management techniques suitable for different agroecoregions. There is a great deal to be learned from the traditional wisdom and the indigenous, time-tested technologies that sustained the farmers of South and Southeast Asia in the past. One of the major objectives of AAHF is to disseminate information on ancient and medieval agriculture by translating old texts/manuscripts into English and publish these translations with commentaries on the scientific content of the texts. The aim of these commentaries of the experts is to stimulate research to verify old practices.

The AAHF has so far published four bulletins: Vrikshayurveda (The Science of Plant Life) by Surapala (c. 1000 AD), Krishi-Parashara (Agriculture by Parashara) (c. 1st century AD), Nushka Dar Fanni-Falahat (The Art of Agriculture) (a Persian manuscript) by Dara Shikoh (c. 1650 AD), and Kashyapiyakrishisukti (A Treatise on Agriculture) by Kashyapa (c. 800 AD). This bulletin has the translation of a Sanskrit manuscript written by a scholar, Chakrapani Mishra, around 1577 AD. He worked under the patronage of Maharana Pratap, the great ruler of the Mewar region of Rajasthan in Western India, who refused to surrender or be a vassal of the Mughal ruler Akbar, despite having lost substantial territory of Mewar. Even when his kingdom remained a small territory in the Aravalli mountain ranges, Maharana Pratap offered his patronage to scholars such as Chakrapani Mishra.

Who was Maharana Pratap? According to Devilal Paliwal [Maharana Pratap–Mahan (in Hindi) published by Rajasthani Granthagar, Jodhpur, Rajasthan], Maharana Pratap was born on 9 May 1540 as the eldest son of Maharana Udai Singh (1538—1572), who was the ruler of Mewar in Rajasthan. Maharana Pratap succeeded his father and ascended the throne of Mewar on 28 February 1572. A substantial territory of Mewar had already been conquered by Akbar in 1568, and constant pressure on him to surrender continued. Through the rest of his life, Maharana Pratap successfully protected his territory against repeated invasions by Akbar's armies. Finally in 1586 Akbar decided to leave Maharana Pratap alone. During his reign, Maharana Pratap developed Chavand as his capital and his kingdom flourished from 1586 until his death (19th January 1597). Maharana Pratap protected his own honor as well as that of his people all through his life.

And who was Chakrapani Mishra? As pointed out earlier, Chakrapani worked under the patronage of Maharana

Pratap. He wrote three treatises: They are, Rajyabhishek Paddhati, dealing with administration, Muhurtamala covering astronomy, portents, etc., and Vishvavallabha describing the art of agriculture in arid, semi-arid, and hilly regions. According to Mr B M Jawalia (Maharana Pratap and his Times, published by Maharana Pratap Smarak Samiti, Motimagri, Udaipur, Rajasthan, India), Chakrapani was a Brahmin of the Mathur subcaste and belonged to Nasavare Chobe family, enjoying the ancestral title of 'Mishra'. Chakrapani was well versed in the Vedas, the 16 systems of philosophy, and also other religious treatises and several branches of science.

Recently (in 2003) a scholarly book containing Hindi translation of Chakrapani Mishra's three texts mentioned above has been authored by Dr. Shri Krishan "Jugnu" (published by Maharana Pratap Smarak Samiti, Udaipur, Rajasthan). The book indeed is a fine contribution to Sanskrit literature. However, its utility to agricultural scientists seems to be limited.

In this bulletin the manuscript (5861-22) reproduced and used was procured from the Rajasthan Prachya Vidya Pratishthan, Jodhpur, Rajasthan through the tenacious efforts of Dr S L Choudhary, Advisor to AAHF and Founder Secretary of The Rajasthan Chapter of AAHF. The text has been translated and commented upon by Professor (Dr) Nalini Sadhale, Hyderabad, once again without charging any fee. The AAHF is highly grateful to both Dr Choudhary and Professor Sadhale.

Two commentaries have been written; one by Professor Sadhale and the other by Dr Y L Nene. Both the commentaries hopefully would stimulate scholars and researchers to provide additional notes on the literary and scientific value of Vishvavallabha. I believe there is a great opportunity for Indian agricultural scientists to relate heritage to the present-day agriculture.

The handwritten text obtained from Jodhpur as well as a typed version of the same have been printed for ease of reading. An index of plant names has been prepared by Dr Y L Nene.

We hope this publication will prove useful to all those interested in agriculture, not only in India but elsewhere in the world.

Y L Nene
Chairman
Asian Agri-History Foundation

श्रीमिश्रचक्रपाणिविरचितः

विश्ववल्लभः।

(Dear to the World: The Science of Plant Life)

by
Shri Mishra Chakrapani

॥ विश्ववल्लभ ॥

॥श्रीगणेशायनमः॥ रघुवीरांघ्रिसरोजयुग्मंनत्वागुरोरपितथाकथयामिशास्त्रं ज्ञानंजलस्यापयतदाश्रयाणांविविधंद्रुमाणामपिरोपणाद्यं १ यावन्मा
नंजलंवैधरणितलगंतत्रायतंयैश्चचिह्नैः पंक्त्यादिभिस्तत्पुनरपिचशिरायद्दिशातोनियाति पाषाणाद्यंतरंयत्मधुरमशुभमधुरंशर्करावाप्यधःस्या
त्तत्सर्वंसंब्रुवेहंसकलजनहितंवीक्ष्यशास्त्राणिशास्त्रात् २ साधारणानूपांश्चजांगलान्सर्वतान्वितान् देशान्निमित्तजान्ज्ञात्वावदेत्सर्वंविचक्षणः
३ आनूपेनिकटेयथोक्तमितिभिर्नीरंभवेज्जांगलेदूरेस्याच्चमरुस्थलेऽश्मनिकटेदेशेसशैलेपुनः एतन्निश्चितमस्तियद्यपितथाप्याख्यामिरूपाग्रहात्त्रा
कृशाश्चोदितमार्गमात्रविशदंसाधारणेपर्वतः ४ दिग्विदिक्स्थाःशिराश्चाष्टौश्रेष्टास्तानवमीशिरा अधःस्थितोर्द्ध्वगायातुसाऽजयांबुवहास्मृता ५ पर्व
ताद्द्रुमूलाद्वाशिराधोयातिनिर्झरे सर्वाःशिराःक्वचित्स्निग्धादृश्यंतेकंदरासुच ६ खन्यमानेतिकठिनाम्लपाषाणसंनिभा पर्पटाश्माभिधानस्मात्तद
धःस्याज्जलंबहु ७ अथजांगलेयोगाः जलोज्झितेविवर्जितेभवतिवेतसोद्रुमोयदाकरत्रयमितस्थितैवतत्पदिग्गताधःशिरा तदाद्युनिकरैर्मिताकरयुगेतथो
सार्द्धकेशिलीकनकसंनिभानदर्दुपर्पटस्तोयगः वारुण्यांत्रिकरेणसार्द्धपुरुषद्वंद्वेशिरास्यामला यत्रोदुंबरिकाभवेन्नरमितेऽधःस्यात्सिताशर्करा पूर्वस्यां
त्रिकरेभवेज्जलशिराऽधःस्याच्छितेःपुंद्वये लोहाभात्वश्मथपांडुराचमृदनुस्यात्पुष्पितिदर्दुर ८ अत्रयोगद्वयं वल्मीकोर्जुनसोम्यगोयदिभवेद्धस्तत्रये
चार्जुनाद्वारुण्यांपुरुषैस्त्रिभिःपरिमितंसार्द्धैर्जलंनिश्चितं श्वेताभार्द्धनरेसुधूम्ररुचिर्गोधाततःशर्करा पीताचानुसिताजलस्यनिकटेतत्रास्तिसुस्वादुच
१० जंबूवृक्षसमीपगाच्चमधुरंवल्मीकतोदक्षिणेनीरंस्यात्पुरुषद्वयेऽर्द्धपुरुषेपारावताभाद्दृषत् वल्मीकाद्दरीजलेशादिशिचेत्तोयंतदापश्चिमेवक्रवंपु
रुषैस्त्रिभिःकरयुगेगोधास्थितिप्रत्यय ११ अत्रयोगद्वयं वल्मीकेयदिसिंदुवारविटपस्तद्दक्षिणेपुंमितेतोयंसार्द्धनरद्वयेऽथकपिलामृच्छर्कराचाक्रमा
त् कोलश्चान्निलितःपलाशतरुणाहस्तत्रयेपश्चिमेस्यात्सार्द्धत्रिनरेप्यधःक्षितितलेश्वेतारुणाशर्करा १२ अत्रयोगद्वयं बिल्वोदुंबरिकेयदाचमिलिते

हस्तत्रये दक्षिणतो नीरं स्यात्पुरुषत्रये ऽर्द्धपुरुषे नीचैः लदा दर्दुरः काकोदुंबरिकायदास्ति निकटे वल्मीकतः पश्चिमे तोयं पुंत्रितये ततो ऽर्द्धपुरुषे गौरादृषन्मृत्त
था १२ अत्र योगद्वयं शाकपिलतरोः शिरात्म जलदा हस्तत्रये ऽधोमता तारालोहसमाच मृत्त्वपशिरा श्रोणीत्तरे तन्मिता वल्मीकः कलिवृक्षतो यमदि
शि स्यात्पश्चिमे पुंमितितत्पश्चात्सयदा तदा ऽर्द्धतहितैः पुंभिश्चतुर्भिः शिरा १४ अत्र योगत्रयं सप्ताऽहे श्वकरं जरद्वारणगं तेहस्तद्वये तद्दिशि स्यात्सार्द्धपुरुषत्र
ये ऽर्द्धपुरुषे कूर्मस्ततो द्वे शिरे कौवेर्यामधुकात्तदास्ति सलिलं चेदुत्तरे पश्चिमे सर्पस्तत्र पुमर्द्धके च धरणी धूम्रारुणः प्रस्तरः १५ अत्र योगद्वये वल्मीकश्च क
पित्थकात्यमदिशि स्याद्दर्दुरो धस्तरोः प्राच्यां सप्तकरे ऽम्पथवोत्तरगं तं पुंभिश्चतुर्भिर्जलं सर्पः कर्बुरकोऽन्वेच पुरुषे मृत्स्नाग्रकृष्णा ततः पाषाणः पुटकः शिराद्व
यमथो त्वासौम्यां जलेनाश्वपः १६ वल्मीकोत्तरतो यदास्ति तिलकस्तत्रैव दूर्वाः कुशाः स्निग्धाः पंचकरैर्मिताच्च पशिरा तत्पश्चिमे पूर्वगा वल्मीको यदि नालिके
रविटपी वा तालवृक्षात्तदा पश्चात्षट्करतो जलं मधुरं पुंभिश्चतुर्भिर्मितं १७ अत्र योगद्वयं वामिषूत्तरकतोऽन्वेच्च बदरी वल्मीकिका वा यदा प्राच्यां षट्करतो
जलं त्रिपुरुषैः सार्द्धैश्चचिह्नानि चेत् कूर्मः स्यात्प्रथमे ततश्च पुरुषे पाषाणकी धूसरो याम्यां त्वाद्यशिरा परोत्तरगता तस्याश्च बधः सात्तया १८ हरिद्वाद्वाम
त्वागे फलिनि-लयमथो तस्मिहस्तत्रये शाक्तोयं स्यात्स्वपुंभिस्त्रिभिः सितत्भुजगः पुंमिते पीतमृत्स्ना भूमिः कृष्णा ततो वै वरुणदिशि शिरा तत्पुरो दक्षिणस्या
मेव ध्रोवा जलस्यान्तकृत्त लतिका तत्र तोयं समीपे १९ अत्र योगद्वयं नागीदंती मदंती त्वृदसितदलोलक्ष्मण मालिका वा तत्पाम्ये तोयमस्ति त्रिनर
परिमिते स्निग्धपत्रे ऽत्र वृक्षे नष्टैका यत्र शाखा नवति च तदधस्तत्प्रमाणं जलं वा स्निग्धा त्वर्वोलत्या स्यात्सुविकट विटपालं व शाखाश्चयत्र २० अत्र योगद्वयं
भूमिर्गभीरशब्दं जनयति चरणैराहता पुंत्रयात्स्यात्खर्जूरी वक्रशीर्षा त्रिनरपरिमिते पश्चिमे तत्र तोयं पुष्पैः श्वेतैः पलाशो भवति यदि तदा कर्णिकारो ऽथ
कीलः सव्ये हस्तद्वये तत्सुरवसति वमत्कारितश्चित्रिवर्षात् २१ अत्र योगद्वयं सोष्मो धूमो यदि स्यात् द्विपुरुषमितितस्तत्र वारिप्रवाहो भूमेर्नीचैश्च धस्यं

ढिनरसितिपयःपांडुरीभूयत श्वेत आचार्यैर्भूरिभोगाद्दहचक्रपितार्थ्यवाकुल्यनीत्वा व्याख्याता प्रेमपाल्याः सलिलविरहिते जांगले भूमिभागे २२ इतिजां
गलदेशभागः अथ मरुदेशे नृनचिह्नैः सलिलमधुना ज्ञाप्यते भूमिइक्षेनथैसम्यक्त्वारं मधुरमधुरं मन्त्र न्मुनिःसंप्रतैर्यैः लोकानांवेमरुनिवसतां।
लाघवाशर्मनश्वतस्मिन्प्रायः करिकरनिभापुच्छलास्याच्छिराया १ वल्मीकःसौम्यगश्चेद्यमधुरजलंस्यात्करीरान्वयाम्यांपानीयंपंक्तिपुंभिःप्रथमनरमिते
पीतवर्णोलितेकः रोहितोहीतदोश्वपश्चाद्दहिगृहमपिचेत्त्रिहस्तान्जलंस्यात्तुभिर्नीरं द्विषड्भिःसलवणमथशिरापुच्छलापश्चिमस्या २ अत्रयोगद्वयं वाल्मी
कोगौरवर्णोयदिभवतिततःपश्चिमस्यांसमीपे पुंपंचाधःशिरावैशाशिदिशिचशिलीपुंमितेमच्चपीता वल्मीकःपीलुपूर्वोयमदिशिपुरुषात्सप्रपुंभिश्चतोयं
श्वेतश्यामोहिरण्यैवकुलसलवणंपुंसिहस्तप्रमाणं अत्रयोगद्वयं- ईशनेःप्रागहिगृहमतःपश्चिमेहस्तमात्रेतोयंपुंभिर्दशायुगमितैःपुंमितेगोधिकास्ते निःप
त्रश्चैर्भवतिमिलिताकंटकारीत्रिहस्तेवातरूणांस्यात्पृथितकरमितेरीशगाश्च्राशिरश्चेत् ४ अत्रयोगद्वयं रोहीतःस्याद्दरमिलितःपीलुनावैत्रिहस्तेतोसंपुंभि
र्दैपपरिमितैर्दक्षिकोर्द्धनरेच श्वेतामत्स्यातरक्तुचमिश्रा ५ कर्कंधुश्चेद्भवतिमिलितःपीलुनावैत्रिहस्तेप्राच्यांतोयंबहुलवणंविंशतिभिश्चपुंभिः विल्वःस्याच्चे
त्ककुभमिलितोवाकरीरोद्विहस्तात्पश्चान्नीरंबहुलमधुरंतत्वसंख्येश्चपुंभिः ६ अत्रयोगद्वयं पंचैकस्याःक्वचिदपियदासंतिवाल्मिकश्चेन्मध्यश्वेतोनरप
रिमितंपंचपंचाशदंबु वल्मीकेचेदुपरिचकुशाःपांडुरावाथदूर्वातस्याधःस्यंभवतिसलिलंत्वेकविंशेश्चपुंभिः ७ अत्रयोगद्वयं वल्मीकेषुत्रिषुपरिवृतोयप
त्यवृक्षेत्वमध्येहीतश्चेद्भवतिपुरुषैःषष्टिभिःपीतभूमृत्स्ना तद्वारुण्यांतमितंसिकताऽधःसमीपेकुपलाशात् ८ अत्रयोगद्वयं वल्मीकेनावृतमथनवेच्चेत्तरो
हीतकात्काकुपुंसप्तत्यासलिलमनलंभूरिमस्वादुतत्र निंवःस्निग्धोभवतिचरसंतत्रनीरंसमंताच्चत्वारिंशन्नरपरिमितंभूरिचाढ्यंसुगंधि ९ अत्रयोगत्रयं
वल्मीकाद्दक्षिणस्यांयदिभवतिशमीग्रंथिभिर्भूरिपुष्पातद्वारुण्यांशतार्द्धैर्जलमितिमधुरंपुंभिराद्येःप्रदिष्टं श्वेतैःस्यात्कंटकैःसायमदिशिपुरुषैर्वारिवाशीति

तस्मैः सर्दार्द्धपुंसि नीपो हिमवद्वनमिश्रैर्लितः पंचविंशैर्नरलात् १० अत्रयोगद्वयं पासाणिश्चावकुम्भुवियदापंचविंशैर्नरैःस्याज्जोयंकृष्णात्त्रिपुरुषम
धोन्धनिकापांडुरवा पुंसमत्यात्मवतिचमहान्निवतोवामभागेपानीयंस्यात्कटुघनदलात्सुस्वरात्तहिंस्नगाः ११ अत्रयोगद्वयं गुल्मौषध्यः सुहरितदलायत्र
वानीपाःशिंपास्तत्रांवुस्यात्त्रिपिनरमितंतत्रसप्तोऽप्यदेवः एवंकिंमरुभुविमयाप्रोक्तमत्यच्चलोकादन्यग्रंथादपिसुचतुरैरुहनीयंचशश्वत् १२ इतिम
रुदेशविभागः देशेऽनूपेहरितजलजाऔषधीगुल्मवल्लीस्तृमिःस्निग्धैर्मिश्रकसहितावीरणंवोलपाथा तोयंतत्रप्रचुरमधुरंपुंत्रिभिर्नितिधःस्थितंस्यात्त्रिस्तानू
वीत्रिकरपरिमितंतत्रस्रोतोंपुप्रदिष्टं १ दंतीरुदंतीतृणशिवावास्यामाषपर्णीगरुडाश्रुवेगा ज्योतिष्मतीव्याघ्रपदीवराहीयत्रास्तितत्रांवुसमीपवर्त्ति २
माषरुद्राणुद्रककोकिलाख्याः सलक्ष्मणालिंदलैदुकीवा ब्राह्मीचपिंडारकशारिवाश्चिन्नलतृणंयत्रजलंसमीपे ३ स्निग्धद्रुमाणांनिकरेलतानांमाक्षिकेऽपिजलं
भूरिचतुःकरैःस्यात् शैल्याचनिम्नाहरितत्तृणाद्यैःसंसैकतानादवतीजलाढ्या ४ आनूपदेशसमीपवर्तिसुतिष्ठितंभूरिजलंचयस्मात् अतोहिचिह्नानिच
भूरिकानिकिंचिल्लिखितानिसमुपेक्षितानीति ५ इत्यनूपदेशविभागः देशेसाधारणेतोयंसर्वत्रपरिकीर्तितं अर्वाग्दशकरात्तत्रचिह्नैरन्तिचभूरितत् १ पा
पार्वतीयेषुदेशेषुअयंसंभवतिध्रुवं ज्ञात्वातद्देशजातिचवदेत्सर्वविचक्षणः २ सारस्वतोक्ताविशदाःकिंचित्तोसपाचयोगालिरिवताविचार्य उक्तावराहेणच
येचवान्येर्देशेषुवेहंस्वलुपार्वतीये १ वोधिद्रुमोदुंवरिकापलाशन्यग्रोधयोगश्चमिथोपदिस्यात् पुंभिस्त्रिभिस्तत्रजलंचतेषांमध्येलेजांगलकेचभूरि २ स्निग्धा
श्चनिःछिद्रदलायदास्युरनोकहागुल्मलताःसदुग्धाः चित्रस्वनाःपक्षिगणावसंतितत्रांवुमिष्टंनिकटेप्रदिष्टं ३ खर्जुरिजंवूशतपत्रिनीपाःसर्सिदुवारावरनक्त
मालाः औदुंवरीसैवचकाकपूर्वाविभीतकस्तत्रजलंत्रिपुंभिः ४ पुष्पप्रधानालरवोलतावाजात्पादपःकुब्जकचंपकाद्याः स्याद्दाडिमीनिंवकबीजपूराःफलान्वि
तास्तत्रजलंनिरुक्तं ५ तालद्रुमोयत्रचनालिकेरीसत्कोचनारस्त्वथवेतसोवा अन्योपिवापर्वतभूद्भिवृक्षाःस्निग्धश्चतत्रास्तिजलंप्रभूतं ६ उक्ताःपुरानिर्झरसंज्ञ

कापाद्दिशि नदेवास्मात्स्वल्पान्तर्वर्तीये पाषाणमध्येऽर्जुनमूलतो वा सिद्धो व निर्यातितनत्रमानं अनूपदेशे त्वथ पार्वतीये शिरोङ्घ्रिभूरि जलाच्च दृष्टा तीर्थेन्यदेशेपि
च देवताग्रे नृमितेऽधस्तात्कचिद्दूर्ध्वगामी ८ प्रागुन्मुखोदुंबरभंजनाम्नावैडूर्यकावर्त्यद्युतिमौक्तिकाढ्या पलालधूम्राकपिलाशिलायातस्याः समीपे वृतो
यमस्ति ९ कौशेयमारक्तीकघृतोपमाया पारावतेंदुप्रतिमा शिलायाः तत्रास्ति तोयं क्षणमेति शीघ्रं शिलाथवायाः गगनान्विता स्यात् १० ससर्करा नीलम
दोपमुक्ताकृष्णाश्च मृद्धन्नसशर्करा वा गोधूमाभा मृत्सिकता च यत्र पीता च या मृन्मधुरं तु तत्र ११ ताम्राभ्रभा सर्करयान्विता या कषायमल्पं सलिलं च यत्र त्वापांडुरा
यां लवणेन तुल्यं १२ गुल्मा द्रुवल्यः कुशरूक्षसूक्ष्माः सछिद्रपत्रा न च तत्र नीरं श्रीपर्णि सर्जार्जुन शाकबिल्वाः सशिंशिपाः पार्थधवाश्च यत्र १३ दूर्वानवं कुशपि
चुमहानिंदपीलूपवासा मासाद्भुमा एणा मितिरिहजले योगतो जांगलेषा पादेनासान्न वतिसगिरौ जांगलानूपकेद्वीवानूपे साष्टुतिभिः रुदिताह स्तमानेन देशे १४
उद्योदेशश्च तुरपुरुषैरल्पमध्याधिको वा निर्नीरो पं तदसु च मितिः कल्पनीया तथैव उक्तं चिह्नं भवति हि यथा तत्र तत्रैव वाच्यं दूर्वाद्यं पञ्चतुर्भिस्त्रिरुदितं मानभेदाद्वि
शिष्टं १५ अत्रिन्मुदर्गलं वाग्विरुद्धघाटितमृषिभिर्या जगद्वनीन्द्रप्रलासः प्रथमः पूर्णतांगतः १६ इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे उदर्गलनि
रूपणं प्रथम उल्लासः ॥ १ ॥ ॥ जाते जलेऽत्र जलाशयानि कार्याणि नानाकृतिमान वंति ग्रामेषु तानीति यथावकाशं स्थानं च मानं च बहिर्यथोक्तं ॥ तडाग
वाप्यावपि कूपकुंडे सदेदखाते कथिते मुनीन्द्रैः विना प्रमाणेन च कूपिकाल्या कुल्या लवालादि यथेच्छया स्यात् २ वृत्तं चतुःकोणमथत्रिकोणमनेककोणं त्वपदं
डलं वं तथार्द्धचंद्रं रसधा सरः स्यात् ज्ञेयं प्रमाणं खनितस्य तत्स्यात् ३ महासरोऽष्टजनमधार्द्धं चेकं भद्रं चतुःकोणमथो सुभद्रं नामानि केचित्सरसां वदंति वृद्धतमैर्यथारह
स्यमत्र ४ आकारभेदस्त्रिषु मानभेद एकत्र पुष्करचनाविभेदः परस्परं संभवएव तेषां कुंडैः समं लक्षणं शंकरः स्यात् ५ श्रेष्ठं सरो दंडसहस्रकेन मध्यं तदर्द्धेन तद
र्द्धकेन कनिष्ठमेतानि यथावकाशं मानाधिकान्यानि भवंति सद्भ्यः ६ गिरिद्वयोरंतरवद्धपालि क्षोण्यां गिरेरग्रविशालभूर्वा अल्पव्ययेनैव महांस्तडागो भवे

तदासंततनूरितोयः ७ अथोपदाम्नः पृथुलासमंतादुच्चाजलस्यागमनंवकुस्यात् अलांबुनोनिर्गमनूष्वतत्र पालोरुतायांहिमहत्सरः स्यात् ८ आपालिशीर्षेध
रणीनलाच्चसोपानपंक्तिःविदधीतधीमान् पालेश्चदार्ढ्यार्थमिहप्रलेपः कार्योथवाहंतरगः सुधायाः ९ निम्नाधरित्रीपरितोंबुपूर्णाभवेत्स्वतः सिद्धतडागएव मा
नेनचानात्पथमानहीनंस्वल्पंचवेसंतकगर्त्तकाद्यं १० तडागमध्येत्वथभूपतीनांभवंतिकेलीनिलयानितीरे नौलत्रकार्याजलकेलिसिद्ध्यैमार्गश्चतेभ्यावतसेतुनी
वा ११ नंदात्रिकूटैकमुखीचवापीभद्राचषट्कूटयुताद्विवक्त्रा जयात्रिवक्त्रानवकूटिकास्याच्चतुर्मिरुक्ताविजयार्ककूटा १२ विशालसोपानयुताथनालिःकार्या
समार्द्धाद्विगुणाथतस्याः मार्गोथवाकूटयुतापिमध्येसमंततस्तोरणकेतनाढ्या १३ द्विमुखोविजयःप्रांतोदुंदुभिश्चमनोहरः कूपाश्चूडामणिर्भद्रोजयोनंदोपशंकरः
१४ व्यासस्यपादश्चचतुष्करंतेव्यासेक्रमादेककराभिवृद्ध्या भवंतिगर्तानिचकूपिकाश्चकुल्यालवालादिविनिर्गमानं १५ कूपस्यनीचैर्यदिवालुकास्यात्सारद्रुकाष्ठैः
करशादिभिश्च स्याप्यापमंवीहयुवादि निर्वापयानरुध्येतशिराजलस्य १६ ग्रामस्यकूपोयदिमुख्यभूतोजलाशयःसोनकार्यः विदिग्गतोदाहकरःक्रमेणबालाबला
नाशकरःसभीदः १७ शिरायदानास्तिदिशासुयत्रकूपोविदिक्स्थोपिनदोषकारी ग्रामाद्यदादंडसहस्रकेवाद्द्यादिसेकायनदोषदोसौ १८ नंद्रसुभद्रंपरिघंचनंद
कुंडंचतुर्धाचतुरस्रमाद्यं भद्रंद्वितीयंततीयंसभिदंमध्येचतुर्थंप्रतिभद्रयुक्तंस्यात् १९ करादृतोहस्तशतानितानिचतुर्मुखानितुचतुर्दिशासु मध्येगवाक्षैःसहिता
निकोणिशालाचतुष्कादियुतानिकुर्युः २० अगाधगाधंत्वतएवसिद्धंतदेवखातंविविधाकृतिःस्यात् यथाखिलंतत्स्यातथैवकार्यंशिलासुधाभिश्चनिबंधनंवै २१ शि
लायदायातिचवापिकादौनिखन्यमानेकठिनामृदुर्वा तस्याः परिज्ञार्थमुनिप्रदिष्टान्वर्णेनिदानीकथयामितश्च २२ ताम्रान्वितांताम्रनिभाविचित्राविंदुन्वितामौ
क्तिकहेमवर्णा गजोपमोष्ट्रसमस्थानुरूपाचंद्रातपाभाश्मितिभार्कवर्णा २३ भस्मांजनाभास्फुटिकोज्वलाभावानीलद्युतिःपांडुरभाशिलाया वर्णैर्विचित्राहरितालभा
वायास्याजनायातिनभेदनाश्च २४ शिलाप्रभेदायचटंकुकानांवक्ष्येह्युपायान्विशदान्सुभूरि येरौषधैस्तोयरुहप्रदतेनक्रंनकुंठंभवतिप्रहारैः २५ भल्लातकाष्टैःस

सलिलेन सिंचेत्पलाशजंबूधवसाद्रणं शिरीषवंवूलकतिंदुकीनांभल्लातचिंचाखदिरादिकानां २६ कांजिकेवदरतक्रकुलत्थाःसप्तरात्रमथयोजयेद्यो वह्निनासुप
रितप्तशिलायाःस्फोटनंभवतितत्परिषेकात् २७ तप्तशिलाचूर्णजलेनसिक्तापुनःप्रतप्तापुनरेवसिक्ता तथाशरक्षारजलेनसिक्ताविदीर्णतामेतिविनिश्चयोयं २८
शिलासुतप्ताऽगुडसर्जिकाभिर्निशाकणासार्षपतैलतोयैः सकांजिकैर्याकठिनाभिषिक्तास्फोटंप्रयात्यल्पधियैरिश्रमात्सा २९ निंववल्कलपत्राणामपामार्गस्यभस्मना
गुडूच्यातिलनालानांभस्मनातिंदुकस्यच ३० गोमूत्रेणकृतःक्षारःपाषाणभेदकः सतैलतक्रतोयेनगुडसिद्धार्थसंवरैः ३१ ग्रीवोर्ल्लि[illegible]षाणार्कपयःपशिखापाःपा
रावताद्योःशकृताचलिप्ते वक्रंनकुंठंभवतीहतैलतक्रेचपातेश्मनिटंकुकानां ३२ टंकस्यवक्रंपरितापतप्ततैलेनिमुक्तंदृढतांप्रयाति भृंगारकस्यापरसेनतैलेक्षि
प्तेतथातक्रुडतैलमध्ये ३३ क्षारेकदल्याःमथितेदिनोषितस्थापितंलोहमथास्त्रटंकुकं नभंगमायातिचलोहदारणेनकुंठभावंव्रजतेशिलातले ३४ सुरापवक्षारसु
डार्कदुग्धेमांकोलतैलेंबुयुतेतुपाते शस्त्रेशिलालोहविदारणेवैनकुंठतांयातिचतस्यवक्रं ३५ क्षारंपयोपत्रचतत्रकूपेकरोतिभिर्श्वखदिरंसचूर्णं यत्राविलंतत्रपला
शभस्मक्षिप्तेपात्पयोनिर्मलतांप्रयाति ३६ भवतिककुभमुस्तोशीरधात्रीफलानांकतकफलसमेतंलोहस्वराजादनानां सलिलमपिचचूर्णंवापिकादोहिमुक्तेमलिन
कटुकुगंधमिष्टमद्यःसुगंधं ३७ पिप्पसिसलिलपथ्याकुष्ठमेलांकुगंधीकतकफलसुचूर्णंप्रक्षिपेद्याविलेवै पयसिखदिरसारंश्रीफलेनाथमांर्ड्ढभवतिमधुरमाशु
क्षारमंभश्चकूपे ३८ उल्लासोद्वितीयोविश्ववल्लभेपूर्णतांगतः वास्तुशास्त्रस्यसंवादीजलाशयनिरूपकः ३९ इतिश्रीमिश्रचक्रपाणिविरचितेविश्ववल्लभेजलाशयनि
रूपकोद्वितीयःउल्लासः॥ २॥ ॥ जांगलानूपसामान्यस्वभावात्त्रिविधाधरा रसैश्चषड्भिःसाभिन्नाशेषास्वर्णतोरसाः १ मलिनापांडुराभूमिश्यामलाधवलारुणा
पीताभिश्राम्ललवणकटुतिक्तकषायिका २ क्रमेणस्वरसाल्पत्वञ्चशेषाजीर्णमतंत्विदं मृत्तिकास्वादनात्तेचज्ञायंतेमेमतिध्रुवं ३ वल्मीकगर्तपाषाणवहुलादूषराऽस्तु
भा दूरोदकाशार्करिलासविषातःसुरोपणे ४ यस्मिन्देशेतुसारेणदृश्यंतेवल्लरीद्रुमाः विंविकाकंटवहुलेनकुर्यात्तत्रवाटिकां ५ मृदुःसमासन्नजलाहिताभूतत

रोपणं नगरामस्य कर्तव्यो लोकद्वयहिताय च ६ सरसा वा मृदुला यत्र वा या सततजांबूनदाभा धरित्री तस्यामयत्नेन च गुटपुष्पपुंनागराजादनचंपकाश्च स्युः ७
ग्मात्सफलाः स्युर्मुचकुंदजातीश्रीखंडिकाकेतकिकेतकांबु रंभाम्रमारोलकुचोपिजंबूमध्वादिश्चान्ये द्रुमवल्लिगुल्माः ८ रोप्याश्चंपकपाटलाम्रवकुलाशोका
श्चताधारणीकोलोदुंबरिकानिंबपिप्पलवटाश्रास्याः सचिंचाशनाः श्मशानोरमधूकाशिग्रुकमहानिंबार्जुनाद्याद्रुमादाडिम्यादिफलप्रधानविटपाः पुष्पप्रधा
नालताः ९ धवखदिरपलाशवंशधात्रीगुदीकाः शिवनिकरभशाकाशल्लकीसप्तपर्णाः सुरतरुरजनीकास्तिंदुकीजातिकाद्यास्ततिविटपवृक्षाजांगलेये
प्रशस्ताः १० उक्ताः किंपुनोपि मयात्र वृक्षा जलाशयान्ते चतुरैश्च पुंभिः क्षितितलस्वभावादचिरेण वृद्धिं प्रयांति ते पुष्पफलानि दध्युः ११ देवप्रभावाद्भवितेन
पाणीमतीवयत्नादहितप्रदेशे वृद्धिं समायांति लताद्रुमाद्या भवंति ते पुष्पफलादियुक्ताः १२ वीजोद्भवाः कांडभवाश्च चान्ये कंदोद्भवा गुल्मलताद्रुमाद्याः उ
क्तास्तथान्येपि च वीजकांडभवा विभेदं कथयामि तेषां १३ चिंचाम्रचंपकमधूककपित्थजंबूपुंनागविल्ववकुलाशनकांचनाराः सक्षीरिकामुपनसाक्षकनालि
केरीतालादिकाः सतिलकाः खलु वीजजाः स्युः १४ जंबीरतिंदुकसदाफलवीजपूरनारिंगनेदकरमर्द्दकचंपकाद्याः कर्णीविदामकमलाख्यकपांडुरागाः श्यामा
तिंदुककनुरवाईदवीजजाः स्युः १५ जातीगुलालतरुणीनवमल्लिकाश्च मल्लीजपानरलकुंदाशीखंडिकुब्जाः तांबूलिकासलिलकेतकिकेतकाद्याः कांडोद्भ
वाश्च मयाकथिताः कियंतः १६ विदारीस्नुहीचंद्रकसिंदुवारश्रीखंडिकाश्वत्थवटाः पलाशाः सदाडिमप्लक्षमुनिद्रुवंशाकाक्षादिकाः कांडजवीजजाः स्युः १७ कं
दोद्भवाः कुंकुमश्रृंगवेरविदारिकासूरणपीतिकाद्याः एलांबुजानीति च वीजकंदसमुद्भवानीति वदंतिधीराः १८ रंभादिकाः संति च कंदकांडजातास्तथान्येपि
समूहनीयाः आरामयोग्याश्चतुरैश्च पुंभिर्दृष्ट्वा च पृष्ट्वा वनपालिनो वै १९ गृहे निषिद्धा विटपाः प्रशस्ताश्चापि तानहं विहिताश्च प्रदिशिरा विशेषात्कथया
मितान् २० गृहस्य वामे पनसवीजपूरजंबूहरिद्रावदरीपलाशाः श्लेष्मांतचिंचार्जुनकांचनारकरंजकाः स्युर्न गृहाश्च सान्ताः २१ वल्मीगृहे तन्निकटेपि हू

चोद्दालविशेषतः कंचकिनः सदुग्धाः फलैर्विहीनाः खलु कंटकीयाश्चात्मोद्भवाश्चापि सुखार्थिपुंसः २२ फलप्रसूनैरहिताश्च सर्वे वन्याश्च थां कोलविभीतका
द्याः एरंडतित्तिडीर्यकनीलिकापि न वापनीया गृहवाटिकायां २३ पुष्पप्रधानाः शतकलाश्च वाच्याः फलप्रधानाः प्रथिताश्च सार्काः लताकुलाश्च वल्लो
षधयः सगुल्मा वाप्याः सदा वास्तगृहवाटिकासु २४ प्लक्षः प्राच्यां वटो याम्यां तथोदुंबरिका गृहात् वारुण्यां पिप्पलः स्पृष्टाः सौम्यास्यां न विवर्जयेत् २५ गृहांति
क्त्नाद्दि वात- - दद्दे ग्रामाद्बहिर्वीयदि वाटिका स्यात् तत्रोपरोपे नियमो पदूरे रोप्या निषिद्धा अपि तत्र सर्वे २६ आग्नेयपाम्यनैरृत्यनिषिद्धवा
टिकापुरात् सर्वपश्चिमतोऽपि पुत्रामधोदशामारुते २७ दुर्गं यथा मानपथ्याववकाशं कुर्याच्च साधारणवाटिकां च सर्वे द्रुमास्तत्र च रोपणीया ग्राम्याश्च वन्याश्च
पि नालिकेराः २८ तत्रापि चंपकमालतीकुरवकानिमीलिकायूथिका श्रीखंडीकरवीरकुंदबकुलावासंतिकासेवती कर्णीकुब्जगुलालहेमसुमनासिंदूरिका
केतकीबंधूकोमचकुंदकेतकिजपातिः मल्लीमुक्तिसुकः २९ इति पुष्पप्रधानाः मालूरो बदरीरसालकरकाम्रशनाश्रीफला श्चिंचा मर्द्दिकि निंबुपूगफि
रत्नालूताजटाश्वत्थकाः खर्जूरी पनसाः कपित्थकरहाप्याश्च संजीरका वंशोदुंबरिशालतालजटिलारोहीतकः पाटला ३० राजादनाशोककदंबजंबूर्जभी
रनारंगमदाफलाद्याः बीजाछरंजामलकदाडिमीइंचां सतालिकेरी कमलारवकालाः ३१ आस्फोटपिलोलकुचो विदाम आलिमूलखतनेरंगाथ तांबूल
कैलाशनपत्रिसूक्षी अन्ये पि रोप्यास्तरवः सगुल्मलतान्विताः पुष्पफलोपभोग्याः ३२ करमर्दकवंशादीन्प्राच्यां विरोपयेद्बुधः द्राक्षापरावतान्याम्यां कपित्थाश्वप
श्चिते ३३ सौम्यां लोकादिकानतान्यथावर्गेति योजयेत् वाप्यामुक्तांतरे तद्वच्छ्रेष्ठमध्याधमान्तरूर ३३ रूपरिद्दाद्विहितस्य निरूपकः उल्लासस्तृतीयः
पूर्णीयातो यदि विश्ववल्लभे ३५ इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे तृतीय उल्लासः ॥३॥ ॥ पयोदकालोऽखिलबीजवापे वृक्षादिसंरोपणके प्रशस्तः त
त्रांबुदे वर्षति रोपनीयाः शरद्वसंतौ च भवतीह मध्यमो हिमागमो ग्रीष्म उ भौ निषिद्धौ वापेऽप्युपेक्षः कथितश्च कैश्चित् सर्वेऽपि काला विहितास्तदानीं यदातिपनो

क्तमेवनेस्मात् २ मृद्वीचसाधारणाश्रशस्तासर्वाङ्घ्रिपारोपणवीजवापे अथो विशिष्टद्रुहिताच्यपादृक्वर्णादिभेदेनचसानिरुक्ता ३ उदुंबरीतिंदुकवीर
चिंचावटाश्वत्थजादन्यचंपकाद्याः सर्वेश्रजंबूपिचवोधरायांतस्करायामपिसंभवंति ४ ग्राम्याअरण्याअपियेद्रुमास्तुगुल्मादिवल्योऽश्मविभिन्नभेदाः न
स्युःचिताबन्धकमिश्रितायांरजादनाद्यावकुलाःसचंपाः सिताम्र्यःकामाक्षटिकादिमुक्ताधराप्रशस्तानचधातुयुक्ता ५. अजातशाखाविटपाःप्रशस्ताःसंजातशा
खाःखलुमध्यमास्युः उद्भिन्नपुष्पाअधमाःफलाढ्यानरोपणीयानभवंतियस्मात् ६ ग्रीष्मेसपत्रानिकटेऽन्यकालेसंजातशाखाःखलुरोपणीयाः वर्षासुस्कं
धयुतावसंतेरोप्याकदाचिद्रोप्याद्रुमात्स्वमतंयथांते ७ निकृंतितस्तुनिःपत्रहरित्यादिअवनितिलंचयत् कृष्टंचवसुधाकेऽनंतयोग्यंवारिकाविधौ ८: उदेहिकादि
कीटानांयदिशंकाभवेत्तदा वापयेद्रजगंधांवाशतपुष्पांहितावता ८ गर्तंकृत्वाथवापूर्वंभस्मचाल्पापूरयेत्तदा करीषेणचवीजानिभावितान्याज्यमाक्षिकैः ९ वापये
त्तानियथास्यात्तंगोमयेमृदितानिच विलिप्यतिलवीजद्रुमस्मात्प्रेनाथवासुधीः १० वीजमंकोलतैलाक्तंजीर्णमप्याशुरोहति भवंतिछिद्राणाःसद्देकाहेनचसर्ष
पाः ११ गर्तेनिधायसिकतामथवासुपात्रेपूर्णंसवल्कलमपीहचनालिकेरं मासात्प्ररोहतिसकृत्तवणांवुयोगाच्छुद्धोदकैःप्रतिदिनंचततैवसिक्तं १२ अंकोल
तैलशकृतापयसाच्युतंचगर्तेवपेत्सुसिकतापरिपूरितेयो आखोटपूगतृणराजफलंसमिकंखर्जूरिखारिककवदामलकनालिकेरं १३ तृणैःपलाशपत्रैर्वासावद्धा
छादयेद्बुधः वीजधात्रीधरांयावदंकुराःसंभवंतिहि १४ समूलमृत्तिकायुक्तानंघ्रिपाश्चसमुद्धरेत् विडंगघृतमिश्रीकृतिस्तान्गर्तेनिवेशयेत् १५ गोमयालिप्तशा
खांध्रिलेकंधान्यारोपयेत्सुधीः पूरितेसकरीषेणगर्तेसिक्तेपसाबकुः १६ कुमाषोडशविंशार्ककरैरंतरिताःक्रमात् मध्योत्तमाधमाःज्ञेयाजीर्णमतात्विदं १७
तृणगुल्मलताद्याश्चचतुस्त्रिद्विकरांतराः रोपणीयायथास्यात्तंवीथीसलिलमंडलैः १८ वृहद्रुमविंशतिभिःकरैःकरैर्वामध्यास्तथाषोडशभिश्चरोप्याः अल्पास्तथो
कैश्चकृतांतरायाः केचिच्चवस्याप्यकृतामपैषा १९ कर्णीवदामलकचाम्लकवीजपूराःसदाडिमाःपंचमुनिपंक्तिकरैश्चरोप्याः चंपादिकामुनिदशार्ककरैश्चचिंचारसा

लेखाद्दलकांदपार्श्वे २० घनानवृक्षविटपाः अंतिदूरस्थिता वा पुविनुन्निताः स्युः तस्माद्यथा व्याससमदेशं सर्वे वाद्या स्ववर्गे खलु रोपणीयाः २१ अशोकपुंनाग
शिरीषनिंदाः स्वपक्षाः ... लिकराश्च वाद्यां रोप्यास्ततस्ते प्रथमं च मृद्वीजातीफलिन्यादिलताः प्रसूनाः स्युः २२ संक्षिप्य किंयता मुक्तो द्रुमाणां रोपणे विधिः अगमत्सू
णितामत्र तु मे उल्लासको हृदये २३ इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे चतुर्थउल्लासः समाप्तः ॥४॥ ॥ अवृष्टिसिक्तस्य नवांघ्रिपस्य संध्याद्वयाने खलु ते
चनं स्यात् यष्ट्यादिकं तन्निकटे निधेयं यथा प्रवाते न विचालयेत्तौ १ त्रिविल्पचालवालानि समये परिषिंचयेत् पयोचितसुमृत्स्नाभिः संपूर्याथ विचक्षणः २ य
दालवाले जलपूरितेनैव शोभनां याति जलं चयाभात् ताहग्विधेन त्वरयान देशमजीर्णमस्य भवदतिधी राः ३ विततं पत्रिपत्राणि म्लानानि विटपस्य च दृश्यंते
सर्वदा तेयाः क्षुधितं परिसिंचयेत् ४ प्रातश्च वर्षासु दिनस्य मध्ये काले सशीते परिषेचनीयाः भगोपरा हि प्यपवावं संततेश्चीक्षेयसायं हि सदांघ्रिपाद्याः ५ सेचनादिवि
धिः प्रोक्तः कालावस्थादिभेदतः उल्लासः पंचमश्चास्य योस्मिन्पूर्णतां गतः ६ इति मिश्रचक्रपाणिविरचिते विश्ववल्लभे पंचमउल्लासः॥५॥ ॥ भवेदुवाताच्च हिमाच्च
धूमाद्वह्नेः ... कतलयाध्वरो संरक्षणीया जरवः प्रयत्नैरेभ्यो यतः सुर्विपदोंघ्रिपाणां १ आधारयष्टेः परितश्च रोपाक्षायोर्न्नीतिभवति द्रुमाणां तेषामघोवा
यनुकूलदेशे वि... निरोधादपि धूमरक्षा २ वह्नेस्तु यत्नः खलु मंडपाद्यैर्दीकुर्याच्च देशे सतणे यदा वात् दिलावरोधोबधनं त्रयंत्रैरास्त्वोः हुमेष्वापि निवारणं स्यात् ३
मंत्रस्तु सारंगपद्धतौ यथा ओं स्वस्ति किष्किंधा स्थितनक्रर१रा... हिताकंडुलोपजीवितस्य हनूमानाज्ञापयति ऋक्षकपतंगपिपीलिकाशलभकरभान्यकर्की
टगंधिकादिविविरहेवन स्यात वंक्रममाणस्य शरीरनिग्रहः समावर्तपतितस्य वानरसिंहस्य वानरः सिंहस्याक्रममाणस्य सागरक्षतोत्तरगतो वायुजीकृतइवनर्देति
हुंफट्॥ ॥ पेन्द्रेतनालिखन ... त्वात् निखनेद्भुवि दोनेकीटपतंगाखुपिपील्यादिविनश्यति ४ अल्पद्रु वृक्षाणामंतरे स्तेनेसघनं नापयेत्सुधीः शतपुष्पां
कुबेराक्षी ततः कीटनिवारणं अल्पांघ्रिपाणामपि पंडपेन तणादिनिर्विष्टनकेन सम्यक् पात्रादिनाच्छादनकेन कुर्यात्स्वल्पेतु ... पारस्यचरक्षणं वै ६ चूर्णतिलानां

त्रितिजस्यमूलेतथोपरिष्टाद्विकिरेच्चभस्म यष्ट्याग्रसंबद्धपटैस्तृणैर्वाविहरणंतज्जालकमार्जनंस्यात् ७ कुद्दालयथवाकंटकिरीपणैतरत्नाद्रुमानांपरिरक्षांविधानात्
कार्मीन्यथावाचतुरैश्चपुंभिर्गुल्मायथाकालमथोखिलावै ८ समाप्तषष्ठउल्लासमरुरत्नानिरूपकः विदग्धहृद्यपाक्वादिग्रंथेस्मिन्विश्ववल्लभे ९ इतिश्रीमिश्र
चक्रपाणिविरचितेविश्ववल्लभेषष्ठउल्लासः॥६॥ ॥विधायरत्नांबुधातमूलंकुर्यादथोपोषणमौषधाद्यैः वल्लीप्रयोगान्धुधातुभूतान्त्स्नेन्यत्रमांसैर्वहृवोनि
रुक्माः १ अथकुणपजलं॥ ॥मेषाजसारंगमृगादिकानांमेदोवसःत्वग्रुधिरंसमज्जं तोयेनवह्नोविपचेच्चसम्यक्पक्वेक्षिपेत्क्षीरमनुष्णनीरं खलितिलानाम
धुतत्रभांडेध्यांसमुत्तार्यचकोष्णदेशे निधायभांडेखलुपक्षमेकंतोयंहितंस्यात्कुणपंद्रुमस्य २ दुग्धोदकंतिंदुकपादपानांप्रियाल भल्लापिचनालिकेर्याः ३ आम्रा
दिकानांहितमंबुशालेः ४ खर्जूरबिल्वलकुचाशननालिकेराः साक्षोटकाःसतिलसर्षपचूर्णदानात् वृद्धिंप्रयांतिपनशाम्रमधूकचंपाद्रीक्षांबुनासखलिनाचविना
तःपरेशुः ५ सर्वद्रुमाणांकुणपस्यसेकोहितोस्तिसम्यक्फलपुष्पवृद्ध्यै विशेषतोदाडिमपादपानां धूपोपिहिस्थूलफलाप्तकारी ६ मत्स्याज्यत्रिफलालिप्तत्रि
फलाज्येनधूपितः दाडिमोपिक्कफलपुष्टफलतस्पवृहद्भवेत् ७ कुलत्थचूर्णक्वथितांबुसेकोवृद्धिकरोदाडिमपादपानां कार्पासबीजक्वथितांबुसेकात्मत्स्यैरनेयी
सह्रतश्चदानात् ८ श्विन्नाश्चमाषाःसजलानिरुक्त्वावृद्धिकांःलतानांजरठामलक्याः दुग्धस्यसेकात्सकलद्रुमाणांफलंसुमिष्टंभवतीतिपक्वं ९ मूलेपुरीषेखलुकु
कुटानांदत्तेनिषिक्तालनतोपसिक्ता अतीवपुष्पानिफलानिधत्ते द्राक्षासुवृद्धिंव्रजतीहशीघ्रं १६ प्रियंगुसिद्धार्थवचाहरिद्राविडंगगुंजातिलनिंबकल्काः घना
म्बकर्णिवुविलोडिताःस्युर्वृद्धिंकराश्चंपककेशराणां १७ कंधचपालालमथोनिधायवचांबुशिक्तोमधुराणिभूरि फलानिधत्तेपनसोतिशीघ्रंमीशांम्रिनिवृद्धिंव्र
जतीहतस्थत् १८ कोशातकीपत्रशिफाश्रयाणांक्वाथेनकल्कासहितेनशिक्तः धत्तेमधूकःकुसुमानिभूरिसुधूपितोप्येषविचित्रयोगः १९ यस्याथशाखाःसुनियम्य
क्वाःस्थूलेनदाम्नाकिलकोद्रवस्य सोल्पोपिधत्तेकुसुमानिभूरिमधूकवृक्षोपि[illegible]जतेचवृद्धिं २० मधूकचूर्णंविनिधायमूलेक्षीराज्यमाद्वीकविमिश्रितंच भूयोपिषि

कोहिकपित्थविल्वोमिश्रान्यनस्थीनिफलानिधत्तः २१ अजैडकानूकरविड्डिःजंगकृतोपचारेणचबीजपूरः नूपोम्बमूत्राविलवारिसिक्तः फलानिधत्तेसुबहूनि
सम्यत् २२ मार्द्वीकयष्टीतिलमिश्रनीरसंसेवितास्याद्बदरीफला[illegible]ढ्या कार्पासिकामतिविपक्वतोयनिक्तासुपुष्पाखलुपाटलास्यात् २३ तिलोदकेनचाज्येन
मत्स्यमांसोपचारतः शेफालीपीतिकासिक्तापुष्पितेकदिनाभवेत् २३ माषमांसगुडक्षीरकाथसेकानददातिहि नारंगविटपेस्थूलसुरसानिफलानिच २४ क
र्कंधुमिश्रीतिलतक्रशेध्रदध्यारनालांबुनिषेचनाद्धि प्रियंगुपुंनागकदंबवृक्षान्सुगंधिपुष्पान्कुरुतेदशाहात् २५ जंब्वाम्राशोकधात्रीककमलखलकुचांलेखपि
चायत्न्मद्तजंबालक्षीररोध्रैःसमधुघृततिलैर्मूलदेशेचविल्वापश्चात्संसेचपेतान्दशदिवसमथोत्तौदुग्धांबुनिर्वैतिषांपीमूत्रतुल्यंनवतिखलुफलंवंध्यतामाग
तानां २६ सतिलगुडविडंगसंनिधायाथमूलेमधुककुसुमचूर्णंपूरपित्वासुमद्भिः वकुकुसुमविकाशीकोलमूलांबुसेकाञ्चतिलकुचवृक्षोतोरनाक्षोदशाहात्
वर्तेतेचूतवृक्षस्यपरश्चलेखनंहितं मंजरीणांविकाशायमुनिभिःपरिकीर्तितं २८ कदलीनांहितंतस्माव्रीहिगोमयसंभवं शालेस्तुषांदुक्षपिंतत्पणचूर्णंविशेषतः
२९ घृताक्तारकमृत्लिप्तःसिक्तोकोलांभसापुनः अशोककुसुमाढ्यःस्यात्पथाकांतापदाहतः ३० कान्तास्वासवासिक्तोवकुलःपुष्पितोभवेत् तिलकश्चतदाश्ले
षात्श्रोकःललनदाहतः ३१ स्विन्नमाषाज्यवल्लीकुमधुलिप्तावपमिनी पंकोद्भवाप्रतिदिनंफुल्लांभोजसुताभवेत् ३२ सुगंधजलसंसिक्तानिदाघेकुणपांबु
ना आतन्वंतिघेसुरभिदलास्यात्केतकीसृष्टं ३३ निखिलाकुलताःस्युरोपिताःसुरभीघृतधूपिताःपुनः घनगृष्टिवसांबुनिर्मदासुघ्नतायफलंतिसिंचिताः ३४ भ
ंगकुंभमुखंमूर्ध्निदधन्नाम्रातकःसुखी दाडिमस्तुमतंचामफलायमुनयोविदुः ३५ भिल्लातमूलयवदुग्धविडंगमिश्रैःतैलैर्न्वबीजमिलितैर्हिजलैःसुसेकः मूला
लवालरुहमुत्सुकरीषदानंधूपोपिदोषविगमायनवेचवृक्षे ३६ सिद्धार्थाकदलीदलानिशफरीविट्कोलमार्जारयोरेतेषांसमभागमाज्यसहितंचूर्णंतरूणो
हितं दत्तंधूपविलेपनोपचरणेराप्यायनंरागहृद्धास्वापल्लववत्फलैश्चमधुरंवालोलपुष्पच्छदः ३७ अपश्लोकःसारंगधरस्य विडंगमार्द्वीकतिलैःप्रलेपोघृत

धूमोघृतस्याम्भिरदालवालेसेकोपयःक्षीरजलैस्तरूणांवृद्धिंकरःस्यात्कुणपैःशिरस्तं ३८ अन्नत्तवातारिकमल्लिकाभिःसमिंदुवारैस्तिलमाषयुक्तैः पयाऽजमांसीक
नयोविमिश्रैर्धूपोनिलेपःसजलेश्चसेकः ३९ सुंठीघृतक्षौद्रविडंगकुष्ठैर्लेपोऽथधूपोपितुषैःकृमिघ्नैः सेकोजलैःस्यात्कुणपांबुभिर्वाविशेषतःक्षीरतरोर्हितोयं ४० श्रा
पूर्यमाणास्तरवःसुमृद्भिर्मूलेजम्बूत्रैरभिसिच्यमानाः सुधूपिताशीतजलैर्निषिक्ताःकुर्वंतिवृद्धिंनितरांविरोगाः ४१ किट्टेणयोर्वसांकीलकापेनपरिषिंचिताः
घृतमाक्षीकसिक्तेनस्फीतास्युर्नीरुजोद्रुमाः ४२ सिद्धार्थैःफलसंयुक्ताःसेविताःगदवर्जिताः जायंतेतरवोनित्यंपत्रपुष्पफलान्विताः ४३ सितामधुकपुष्पैश्च
यष्टीकुष्ठजमांसिकैः निक्षिपेत्कुलिकामूलेरचिताःस्वर्णरुहां ४४ इतिकतिपययोगापोषणार्थमतास्तेऽन्यत्तुह्यास्तयान्येविविधजनपदानांयेहिताःपादपानां
४५ उल्लासःसप्तमःस्पष्टोऽत्रंयेस्मिन्विश्ववल्लभे पोषणादिविधौनव्यपूर्णतामन्यगादयं ४६ इतिश्रीमिश्रचक्रपाणिविरचितेविश्ववल्लभेपोषणविधौसप्तम
ल्लासःसप्तमः॥७॥ः॥अथतरुचिकित्सा तिक्तस्तक्षायैःसुःकटूष्णलवणैस्तरोः मधुराम्लस्निग्धलवणैर्वातपित्तकफांश्छुयात् १ तृणाभिर्वातरूणांच
वातपित्तकफागदाःसंभवंतीतश्चांत्येवस्वैलक्षणमौषधं २ जलौषधानलसंपुष्टेजन्थेकीटादिनाक्षते शीतदग्धेग्निदग्धेचविद्युत्पातहतेतथा ३ वातभग्नेज
रादुष्टेतंमर्दननिपीडिते नीतेस्थानांतरेवापिनिवासेप्राणिनांभृशं ४ विक्षितेपिंसंस्कारेप्युपचारादिपीडिते अन्यथौषधानिदानेचक्षुधितेदोषसंभवे ५ एभि
स्तरूणांविपदःसंभवंतिविशेषतः तस्मात्सर्वप्रयत्नेनज्ञात्वाविधिमुपाचरेत् ६ देशांतरोद्भवाःकेचित्ल[illegible]तास्तादिकाइह वापितारोपिताःसम्यक्संभवंतिय
तोध्रुवं ७ तद्भूमिदोषात्कालस्यधर्मविलासात्तोथवा सुश्रुषणपरिज्ञानदेवतावरतोथवा ८ अथवातादीनांलक्षणान्याहुः रूक्षोलोड्डःकृशोदीर्घोनिष्प्रभुःस्व
त्सचेतनः फलपुष्पातिनोधत्तेऽथवात्स्यात्निचवातलः ९ विपाकसोष्णैर्हिसैःकटूष्णैःसस्निग्धमांसक्वथितांबुमिश्रः सेकोहितोवातिकपादपानांमुद्गलनंगोमय
भस्मनापि १० निर्गुंडिकारग्वधपंचशाखापत्रांबुतोयैरभिसेचनेन तन्मूललेपेनतिलान्वितेनप्रयातिशांतिंपवनश्चतेषां ११ आच्छादनंतैलरवलिप्रदानंमू

लेडुनाणमजमूत्रसेकः कुल्माषकच्छागपुरीषचूर्णत्वगश्वगंधाजलसेकद्द्यः २२ वानान्कोशाम्रदंतिचगुडिकाग्रंथपः सुकुंभिषु वे गोविड्भल्लातकवसाले
चैःकुणपतोजयेत् २३ रास्नाश्वगंधापवनारिनागकणकषायेणकृतोहिसेकः सवातिकरोग्रानवृष्मिकापाशोयेनवातंप्रबलंजयेत २४ निर्गुडिकागुग्गु
लुशीफसर्पिःकुवेरनेत्रासनवीजधूपः हितोद्रुमानांपवनात्मकानांमूलेजविशल्यलिपूरणंच २५ अथपैत्तिकलक्षणं पांडुपत्रः कृशःपक्षैःसुष्कशाखःस
पैत्तिकः प्राप्तनाशःसहतोऽकालफलपाकीद्रुमःस्मृतः २६ सस्निग्धशीतैर्मधुरैरसैश्चश्रमातिनाशंसहसाचपित्तं शीतांबुसेकैःसुरभीपयोभिर्हतंद्रुमाणांस्त्रि
तादितैः २७ उशीरमुस्तामधुदुग्धसर्पिःकृपोपचारःसमपेत्त्वपित्तं जंबालपंकजजालविलेपतोवाचूर्णंसितात्तौद्रघृताद्यधूपात् २८ अथश्लेष्मद्रुमलक्षणं
स्निग्धच्छदस्त्वग्विशदान्नपुष्पःफलैर्गतस्वादसपिच्छिलैर्यः लताद्वतांगःपरिमंडलोसौचिरप्रवालीकफवान्द्रुमः सः २९ तिक्तोष्णरूक्षैःकटुभिःकषायैःकफोरसैर्गो
शमुपैतिशीघ्रं जलैश्चकोष्णैःपरिषिच्यतेपितरवोन्वेतश्लेष्मलपादपोवै ३० पंचार्जुनोदुंबरिसप्तपर्णीनिंबत्वचांवैविहितःकषायः श्लेष्मान्वितानांविहितश्चचूर्णं
तथैववासाघनरोहिसानां ३१ ब्राह्मीसहचरारिष्टवासाखदिररोहितैःकृतःक्वाथोहितोचूर्णंश्लेष्मिणांपरिसेचने ३२ सकृष्णामृतावासाव्याघ्रीरोहीषनिर्मितात्
क्वाथात्स्वप्रकृतिंयातितरुःश्लेष्मजितोध्रुवं ३३ लेपोव्याघ्रीरसेनापिमधुकफलसंयुतः धनपत्रकरोचूर्णंसन्नाहात्श्लेष्मिणांहित ३४ अथजलसेकाधिक्याजीर्णल
क्षण अतिद्रुतापांडुरताप्रवालहानिश्चशाखाग्रविशोषणंच जलातिसेकात्सपिपीलिकात्वंचूर्णंभवेन्नात्स्यविगंधताच ३५ अतिस्नाऽल्पाहारैःसुपरस्पजनितैस्त
स्पहस्तसमूलादिवृक्षान्विश्वाव्यदोषात्जनितमपिरसंतत्र्माणामतुरूपं मश्चाल्विस्वाविडंगैःसमधुघृततिलैःपूरयेज्वालवालेमृक्षित्तदुग्धतोयैःसिंचिततरुर्योया
तिनिर्दोषतांद्रुः ३६ पंचार्जुनत्वङ्कस्मप्रदानेचहितंधोरल्पसेचनं ३७ अथाल्पाद्युजीर्णलक्षण स्वल्पान्नाजीर्णतोचूर्णंपल्लवानामसंभवः सपिपीलिकताचापि
शोषःप्रजायते ३८ त्रिफलांचकुवेराक्षीदत्वामूलेद्रुसेचयेत् सविडंगेघ्रदीसौद्रलेपस्तस्यहितस्तरोः ३९ वैकंकतस्यपत्रांमूलेचूर्णप्रदानतः मध्वाज्यधूपा

सेकाच्च कथ्यतेऽजीर्णतरुलकः ३० शाखास्य शोषणं तस्य त्वस्य शीघ्रं प्रजायते वृक्षस्य पल्लवम्लानिर्बाढमौषधतो मतः ३१ कर्कंधुचारवीजैश्च सुरभीदुग्ध-
भाविते: औषधोत्थ्या व विकृति लेपात्संशमयेत्तरोः ३२ उद्धृत्य मूलाच्च मृदं सुसिक्तां संपूरयेदन्यमृदालवालं मध्वाज्यदुग्धैश्च विलिप्य गाढं तं सेचयेत्क्षी
रजलेन रक्तं ३३ सिताज्यगुग्गुलकृताद्धूपाच्चाम्पंतिवेरुजः चारुपल्लवत्वक् शीघ्रं जायते तस्य शाखिनः ३४ अथ कृमिदोषलक्षणं दोषैर्विना यस्य तरोः प्रवा
लहानिश्च शाखाग्रविशोषणं स्यात् त्वग्रन्ध्र शीर्णं पत्र विवर्णता च स्तानिर्णशान्तकृमींश्च विद्यात् ३५ कृमयो द्विविधाः प्रोक्ता बाह्याभ्यन्तरा अपि बाह्यास्त्वगाश्र
याः कश्चित्तत्र प्रमकलाश्रयाः ३६ कांडारको नाम कृमिर्मूलशाखातराश्रयः तद्दोषतस्तरुर्याति नाशं तत्तानुपाचरेत् ३७ कृमयो दुष्टदोषा जलदोषाच्च दोह
दात् एवं तत्र प्रतीकारं वक्ष्ये शास्त्रानुसारतः ३८ आरग्वधारिष्टकरंजसप्तपर्णत्वचा जंतुरिपोश्च चूर्णैः मूत्रैर्गवां पर्युषितैः प्रलेपात्कृमीन्जयेद्बाह्यगतान्तरूणां
३९ विडंगसिद्धार्थकटुत्रयेण गोमूत्रमत्स्यात वचायुतेन लेपेन शाखांतरगान्कृमींश्च हरेत्सवर्णीकुरुते त्वचं च ४० गोमूत्रमत्स्यातकनिंबमुस्तावचाविडंग
त्रिविषाकरंजैः ससर्जसिद्धार्थकलिंदुवारैर्धूपः कृमीन्हरति द्रुमाणां ४१ विडालगोमायुवराहविड्भिः सिद्धार्थगोमूत्रयुतः प्रलेपः कृमीन्द्रुमाणां हरते तरस्यात्
बाह्यान्तमीषां सघृतो पि धूपः ४२ धूपायितः क्षीरजलैश्च सिक्तः प्रवालशाखाहरितो द्रुमः स्यात् निंबसिद्धार्थवचाविडंगहिंग्वर्जुनत्वक्तिलदुग्धतोयैः ४३ जयेत्
कृमीन्निंगुदिकाफलत्वक्गुडांबुसेकात्सकलद्रुमाणां लेपाच्च दुग्धाज्यगुडेंगुदीनां धूपाद्विपश्चास्थिनिबंधनाच्च ४ मधोद्रुमाणां परिरोपितो दिपलाशशाखाफलितो
पदास्यात् जलोत्थरोगं जलजांश्च कीटान्निवारयत्येष यथाद्रुमौकः ४५ अथ छिन्नतरुचिकित्सा सेको जलैर्मूर्छितगोमयस्य विच्छेदपूरणमालवाले विडंग
मध्वाज्यगुडैः सदुग्धैः प्ररोहकृच्छिन्नतरोः प्रलेपः ४६ अंकोलतैलेन विलिप्य पूर्वं पश्चाद्विलिप्तः खलु कूपपंकैः छिन्नोऽपि पोदुग्धजलेन सिक्तः प्ररोहमायात्यचिरेण सद्यत्
४७ अथ शीतदग्धचिकित्सा अंकोलदुग्धाज्यमधुप्रलेपान्मूले च मज्जामयतैलदानात् शाखातिलक्षीरनिषेकलेपात्सिक्तो वृक्षः शीतहतः प्ररोहति ४८ विडंगकुल्मा

घमपयोविनिश्रचूर्णतिलानां निहितं च मूले शीताहतौ कीर्जनयेच्च शाखा अंकोलतैलान्वितमार्द्रलेपः ४९ मूलेतरोगोमयभस्मदानं निर्गुण्डिकाशीफकषायसेकः शा
खाप्ररोहं जनयत्युदीर्णं वसावराहस्य च लेपसेकात् ५० अथाग्निदग्धचिकित्सा क्षीरांबुसिक्तो मधुनावलिप्तः कंदेन पद्मस्य पयोन्वितेन मृदालवाले परिपूरितो द्रु
र्विनिर्मिपत्राण्यनलेन दग्धः ५१ कर्कंधुमज्जा मधुनावलिप्तः पंकेन लिप्तः कुणपांबुसिक्तः प्ररोहमायात्यनलेन दग्धः क्षीरातसीलिप्ततनुश्च शाखी ५२ अथ विद्युद्धत
चिकित्सा मधूकमुक्तातिलमाषचूर्णैः सशकृद्दुग्धैर्विनिषिक्तमूलः प्ररोहयत्येव तरुश्च विद्युन्निपातदग्धोऽप्यचिरेण सम्यक् ५३ उशीरमुक्तामधुदुग्धलिप्तः सिक्तो हिमो
वज्रहतः प्ररोहेत् सिताविदारीतिलनागजिह्वाकुष्ठीमूलपयोंबुसिक्तः ५४ शीतोपचारैर्जलजातकंदशैवालपंकैर्वकुशैर्विलिप्तः दग्धप्ररोहं कुरुतेथ शाखी सिं
चेद्यथा शुष्यति नैव लेपः ५५ अथ वातजन्यचिकित्सा संभिन्नतं सपूर्वतमथ रसनया वध्यवातादिजन्यं लत्वा स्नेहं वरत्वक्कुसुमधुघृतसितादुग्धलिप्तं च पश्चात् मूले
सम्यक् दत्वा सुकरिषनरितेसिचमेत्क्षीरतोयैस्तस्मात्स्वस्थः पलाशीघनविटपदलापुष्पितः स्यात्फलाढ्यः ५६ अथात्यंतपीडितचिकित्सा मूले खनित्वा परिपूर्य
मृद्भिः क्षीरांबुसिक्तो जठरः फलाढ्यः स्यात्पादपोमर्दनपीडितोपि सहावदानात्प्रकृतिस्थितश्च ५७ अथ स्थानांतरनीततरुचिकित्सा विडंगदुग्धांबुनिषिक्तदेशो म
धूकचूर्णसतिलं च मूले स्थानांतरस्थस्य च पादपस्य मृज्जोमयाभ्यामपि पूरणं च ५८ अथ गवाद्विजादिनिवासदुष्टतरुचिकित्सा करीषमालीर्यतरोरथस्मात्प्रज्वाल्य ह
स्त्यादिनिवासितस्य कृत्वालवालं परिपूर्य मृद्भिर्मध्वाज्यलेपोंबुपयोनिषेकः ५९ अथ संसर्गदुष्टचिकित्सा मध्यस्थितो द्रुश्च निकृंतनीयः संसर्गदुष्टः सुखमाप्नुयात्ते
उद्धृत्य तत्सांनुमदानुपूर्णद्रुर्भूमिदुष्टोऽम्बुनिषेकतोपि ६० स्थानांतरेल्पः परिरोपणीयोऽप्यवासमुद्धृत्य विधाय गर्तं प्रज्वाल्य मृद्भिः परिपूर्य तोयैः संरोपयेद्दुष्टतरुं च
सिंचेत् ६१ अथ ऋतुधर्मविपर्यासितरोस्तं समुपाचरेत् दुग्धांबुकुणपैः सेको दोहदादप्रतिक्रिया अभिसेंचर्यत्र मंत्रादो कार्पार स्थानरोर्न्दशं मंत्रयंत्रांतरैस्तत्रैर्दैव
ताराधनेन वा ६२ वंध्येतिलानां दत्वामनिकृष्य पार्श्वमृदालवालं परिपूर्यतेषां क्षीराज्यदुग्धैश्च विलेपनं स्यात् दुग्धार्द्रतत्वक्कृमिनुत्पयोभिः सेको द्रुमाणां फलपु

शुद्धये ६४ अथोपचारदुष्टतरुचिकित्सा दुग्धांबुसेकोप्युपचारदुष्टतरोर्भवेत्पुष्पफलाभिवृद्धौ लेपस्तिलक्षीरघृतैश्च सेको गुडान्वितैरौषधदूषितेपि ६५ यदौष
धादिसंसर्गमदाद्युपनयेच्चतत् आलवालंचसंपूर्यमृदाभूयोविचक्षणः ६६ म्लानपांडुपतत्पत्रफलजीर्णकुसुमोंऽघ्रिपः कुंचत्प्रवालोऽसेकात्स्याद्धारवाद्वृद्धिवि
वर्जितः ६७ मध्वाज्यधूपितःक्षीरयवचूर्णविमिश्रितः हरित्पत्रास्थिरफलोद्रुमःस्यात्कुणपादपि ६८ पत्रपुष्पवृद्ध्यैपूर्वोक्तंतत्कार्यंहितमिच्छता तिलतैलादिकंशी
तकालेदद्याद्विचक्षणः ६९ शर्करातिलगोक्षीरलेपात्सेकाच्चसांबुनः अंघ्रिपानांसमस्तानांशोषशाम्यतिसर्वथाः ७० [illegible]कृतोपचारो
नपदावृद्धिमायातिपादपः दोषात्स्थानांतरेसोपिरोप्योसावलपादपः ७१ कटूगन्धिर्लोटक्वाविडंगसिद्धार्थकृष्णारजनीकल्पेन संसाधितंक्षीरयुतंघृतंयत्तस्मा
ल्लेपात्सुखिनोंघ्रिपाःस्युः ७२ अथस्रावचिकित्सा धववेतसनक्रीरीत्रिफलार्जुनवल्कलैः पयःसिद्धैर्विलिप्तानांस्रावःशाम्यतिशाखिनां ७२ तिलयवशतपु
ष्पामत्स्यधत्तूरपत्रक्वथितजलनिषेकात्स्रावशांतिस्तरूणां गुडसलिलपयोभिःसेचितानांतरूणांभवतिसुखमथैषांपुष्पपत्राभिवृद्धिः ७३ सुरभितृणविदारी
पद्मकोशीरपथ्यातगररजनिकुष्ठश्रीकुजंतुघ्नरोध्रैः सुरतरुजलदुग्धैःप्रस्यमात्रैर्विपाकेभवतिचतिलतैलैरोगतुल्यादपानां ७४ विडंगरोध्रसंमिश्रसितादुग्धांबु
सेचनं शीतकालेहितंसस्यात् लतादिरपितांसदा ७५ आलवालेचमृद्दानंतिलदुग्धांबुसेचनं शीतकालेलतानांवैविटपानांविशेषतः ७६ जलसेकःसदाश्रेष्ठो
लतादिर पितांभवेत् क्रियापचोचिताकार्यातत्रसर्वत्रशाखिनां ७७ शास्त्रेषुयोगाबहवोनिरुक्ताइहानुक्तालिखिताःकियंतः चिकित्सितंतत्कुशलैर्विधेयं
विचार्यबुध्याविहितंद्रुमेषु ७८ ग्रंथेस्मिंश्चक्रपाणिश्चपूर्णतामनयद्बोगमत् चिकित्सितंद्रुमाणांतद्दुत्तमोविश्ववल्लभे ७९ इतिमिश्रचक्रपाणिविरचितेवि
श्ववल्लभेअष्टमउल्लासःसमाप्तः ८॥ ॥कुमुदफलविरक्तंबीजमादायशुष्कंमृदितमथकरीषेमाहिषस्याग्निदग्धे दिनमतिपावकुदुग्धेनतद्दुप्तंजनयतिकराबी
रंकौतुकंस्याच्चलोके १ पक्वे लीनपलांडुनीहनिहितंबीजंमधूकान्वितंयावत्सप्तदिनंततोरविकरैरूढ्यत्संशोषयेत् दुग्धाज्येषपुनर्निधायविधिवच्चांकोल

तैलान्वितेऽम्बुसिक्तं ह्रुहंतीत तोतिजनताचित्रकरं स्यादिह २ एरंडवीजं च वराहरक्तवसाविमिश्रं परिभावितं तत् अंकोलतैलेन दिनं तदुप्तं सूते थकारल्लतां विचित्रं ३ कोलकीनवसानां मदनकटाररभाविते वीजमात्रतावुप्तमारोहति फलत्यपि ४ वालांघ्रिपे यो सुखिरं विधायपश्चैव वीजैः परिपूरितं तत् संलेपितं वत्सविसाप्रवृद्धेन स्निग्धदाकारफलेनवेद्धे ५ कूष्मांडवार्त्ताकिपटोलकादिवीजवराहस्यवसाविनाभ्यः उप्तं सुसिक्तं च फलानि सूरि हेहत्पनस्थीतिदधाति चित्रं ६ मध्यास्यालुलिंतविशोषकिरणैः स्तूपस्य वार्त्ताकिजं वीजवल्लियुते विधाय सुखिरं कूष्मांडके कोमले क्षिप्त्वा गोमयविलिप्य सहसा पक्के समुद्धृत्य तच्चोप्तं सेसमंये फलं वितनुते कूष्मांडस्तुल्यमहत् ७ अंकोलतैलेन वराहनक्रवसानुलिप्तं खलु वीजमात्रे उप्त्वाचकूमीकरकांवुसिक्तं सद्यः प्ररोहं कुरुते तिचित्रं ८ आम्रस्य वीजं शशकूर्मरक्तेर्दिनत्रवारं परिभावितं यत् दुग्धांवुसिक्तं तरुतां प्रपन्नो फलं विधत्ते खलु सर्वकाले ९ अंकोलतैलेन नरक्तमिश्रं वीजं करे रोहति मृत्स्नुपूर्णे सिक्तांवुना रोहति तत्क्षणेन चित्रं हि लोके वितनोति सूरि १० अंकोलतैले परिभावकं दंतं कोतुदंगोन प्रभावितं च स्थितं घटे वै करकांवुपंकतोयैः सुपूर्णे कुसुमं प्रसूते ११ करीषकोलास्थिविदग्धगर्त्तेपूर्णे भृष्टवालुकयानुतत्र उप्तं सुसिक्तं खलु मूलकं स्यात्स्थूलात्समं चित्रकरं च लोके १२ अथ वृक्षविचित्रीकरणं शक्रद्विडगेक्षुरसेन सिक्तो यः आलवाले खलिमिश्रिते न द्रुमः सदा पुष्पफलानि धत्ते मनोहरं लोकविलोचनस्य १३ इष्टिकाभिः पुरुषत्रमाणे चितेवटो योविरपश्च जातः सवामनः पुष्पफलो विधत्ते सदैव लोके वितनोति चित्रं १४ मूले सदा कोलवराहरक्तमेदोवसासंक्षपितेन सिक्ता मिष्टान्यपान्नस्य फलैः सस्मानि फलानि सूते कदलीति चित्रं १५ विडंगयष्टीमधुक्षौद्रदुग्धैर्यवस्य चूर्णेन गुडेन युक्तैः लिप्तावितिरखांवुपपीतिषिक्तो अल्पकोऽङ्घ्रिपः स्यान्मधुरः स्वभावात् १६ विडंगयष्टीमधुशर्करांवुक्षीरैर्निषिक्तोऽम्लफल स्वभावात् धत्तेस्वकं द्विरपोपि मस्यस्थूलानि मिष्टानि फलानि चित्रं १७ वराकाहीघृतकुंचिका कृमिहरा राजीघृता मत्रके संस्थाप्येक्षुरसे दिनतिथिमितो नेतकूले ततः आलिप्य यमदासुपूर्ये वहुशः संधूपितः सेचितश्चेचूर्णाचरसेरकालकुसुमं धत्ते फलान्यंघ्रिपः १८ वालांघ्रिपं पाति विदार्यतत्र क्षिपेच्च वीजानि विलेपयेत्तं गोवत्स

विड्ङ्गतरुणः सधत्ते तादृक्फलानीह विचित्रमेतत् १९ छिन्नस्कंधो पत्तरुणतरुर्वेक्रिता मंदद्ग्धो लिप्तः शूपः कुणपलवणपङ्कैन्द्रसर्प्पिःपयोभिः दुग्धांभोभिः सु
परिविचितो नोहि ह्यध्वमूले धत्ते काले सकुसुमफलेनापनस्त्रिचित्रमेतत् २० विलिख्य मध्यान्विडंगदुग्धैर्लिप्तानुगाढं तणचर्मबद्धा दुग्धांबुसेकादिह पमस्याःशाखा
धत्ते चिरं पक्वफलं विचित्रं २१ द्रुमस्य फलिता शाखा विलेख्या द्वेण चर्मणा बद्धा पक्वफलं धत्ते चिरं चतुश्चित्रकृत् २२ नसेचनीया विटपा कुलत्यक्वाथांबु
नानत्फलपुष्पनाशं करोति तद्वत्सवणाङ्गनलकृत्कर्कारिकाकिंशुकतोयसेकः २३ विंचिनीबदरपार्श्वफलानां क्वाथसेवितनरुः फलपाकं तिंदुकांबुघृतलिप्त
फलोवेयाति नैवचिरमत्र विचित्रं २४ कमार्षीनीपार्श्वफलाल्पकीलितपोधनैरंडसितान्निकानां कृतापसेकात्सकलङ्गमाणकरोति सस्यात्फलपाकहानिं २५
सद्योहतस्य छागस्य द्रुमस्कंधं च चर्मणा सुबद्धां च शाखायां फलपाको न जायते २६ अथ पुष्पचित्रं उंसस्तुत्याघहपारिकोउवारत्रेपं मद्युतमालवाले सिक्तं
घनोशीरजलत्वभिलत्सुगंधिचित्रं सुमनःप्रसूते २७ विदारिकंदेक्षुरसेन लिप्तो मूले द्रुमश्चेक्षुरसेन सिक्तः द्वतालवालः कुसुमानि भूरि सदादि धत्ते कुतुकं च लोके
२८ समस्तुवत्सोपलतो सिक्तः सुधूपितः कुंदरुधूपकेन पीतानि तुल्यानि च चंपकस्य शमपलाशः कुसुमानि धत्ते २९ निशाकिंशुककर्प्पासीरो धृतोयैः सुसिचितः
विधत्ते कनक[illegible]हृदृः सुवर्णानं कुसुमं सितं ३० मंजिष्ठाहिंगुलुक्षीरकपोतास्कृविमर्दिता सौराष्ट्रीलासितं पुष्पं सुवर्णानं करोति च ३१ धवखदिरकपाली
कुष्ठसौरम्यवसुक्षधितजलनिविक्तैर्लेपतेश्वापिशाखी कुतुनसुरभिमृत्स्नामूलसंक्षेपणाद्वै विगतसुरभिपुष्पः स्यात्सुगंधपुष्पः ३२ एलानखत्वक्तगरां
बुकुष्ठमांसीघनोशीरकवाःमसिक्ताः सुगंधपुष्पाश्च भवंति सर्वाः समृधिकाः कंदजयादिकाश्च ३३ लताविटपयोर्मूले मृदुमत्स्यान्निधाय च सिक्तेदुग्धांबुभिः
पुष्पवृद्धिस्तत्रसदाभवेत् ३४ नखांबुतगरोशीरत्वक्पत्रजलसेचिताः चित्रसौरभ्यपुष्पाः स्युर्जातीनेमालिमल्लिकाः ३५ एलाजचोशीरघनाबुकुष्ठत्वक्
पत्रिकाचकहन्नूजरीतां चूर्णंचदत्वापतदंबुसिक्ताः सुगंधपुष्पाविटपालताःस्युः ३६ मंदारसंध्योऽदितिगितायाकूष्मांडवल्लीखलुमूलभागे संपूरितागोमय

मृत्तिकाभिः सिक्ता सदा स्थूलफलानि धत्ते ३७ निधाय मूले मृदु भस्म पूर्वं मृत्तीमयाम्भां परिपूर्य पश्चात् यातीविधत्ते कुणपांबुसिक्ता वसंतकाले कुसुमा
न्यपीह ३८ चूर्णैर्यवानां तिलपिष्टमिश्रैः सिक्ता यदि ~ गुडूतैपि मूले उर्द्धत्रवृत्ता विटपैश्च तुल्या भवंति वल्ली जलदुग्धसिक्ता: ३९ अथ मतांतरे फलचित्री
करणं मधूकपुष्पैर्मधुयष्टिकुष्ठसिताघृतक्षौद्रयुतैश्च पिष्टैः आलिप्यते यद्विटपस्य मूलं फलं च तस्यास्थिविवर्जितं स्यात् ४० गुंजामधूदुंबरशर्कराज्यमधूक
पुष्पाणि विकीर्य कांडं अंतर्निधायोपरिवत्स विद्धिर्लिप्ततरोस्यात्फलमस्थिवर्ज्यं ४१ जीवंतिकापत्रमनःशिलालमंजिष्ठिकादारुनिशायवैश्च गोजाविट्
थैः सतिलैर्विलिप्ता कार्पासिकी स्याच्च सुनीलतूला ४२ कार्पासिकायवनिशापलाशतिलपूरिता मूले तदंबुसंसिक्ता रक्ततूलफला भवेत् ४३ त्रिफलाशाल्मली
त्वग्भिः सनिशाकुष्ठसीधुभिः लेपात्सेकाच्च कार्पासी हरित्तूलफला भवेत् ४४ कार्पासी सतीलीतिलतात्रपहीच्चा निशायुग्मसुधृचूर्णलेपात् तदंबुसिक्ता खलु
पीततूला कार्पासिकी स्यात्कुंकुमतुल्यः ४५ चूर्णैर्यवानां परितो ऽथ वेत्तुरसेन सिक्ता जविडंगधूपैः सुधूपिता मापरिपाककाले भाद्रा भवेन्मिष्टफला हि स
स्यात् ४६ पूर्वोक्तयोगद्वितयस्य नूनं स्वभावतीक्ष्णा अपि सेकलेपात् समस्तवल्ली विटपाश्च रम्यसुमिष्टभेदस्विफला भवंति ४७ कस्तूरिकागंधरजः सुगंध
तोयेन संसिक्ततलः सुपक्वः तत्तुल्यसौरभ्यरसस्तथेक्षुकांडो भवेन्मिष्टतरो हि नूनं ४८ जलैः लोशीरमुस्तांबुसिक्तस्त्रिदिनविंशकं तथा सौरभ्य संवाही भवेदीक्षु
रसो हि वै ४९ विचित्रकरणे योगाः कियंतो लिखिता मया दृष्ट्वा शास्त्रैरन्ये शास्त्रलोकानुसारतः ५१ विदग्धहृत्पद्मादित्ये सिंतविश्ववल्लभे चित्रीकरणमुल्ला
मुल्लासेन नवमोऽभ्यगात् ५२ इति श्रीमिश्रचक्रपाणिविरचिते चित्रीकरणं नवमो ऽध्यायः ॥ संवत् १८२५ शाके ७९० फाल्गुनकृष्ण ९ नवम्यां लिखितं लक्ष्मी
नारायणेन नकावरस्य पठनार्थं ॥ श्रीरस्तु ॥

॥ विश्ववल्लभ ॥

श्रीगणेशाय नमः।

श्रीराघवेंद्रांघ्रिसरोजयुग्मं नत्वा गुरोरपि तथा कथयामि सा(शा)श्वत्।

ज्ञानं जलस्याथ तदाश्रयाणां विधिं द्रुमाणामपि रोपणाद्यं ।।1।।

यावन्मानं जलं वै धरणितलगतं ज्ञायते यैश्च चिह्नैर्यावद्हस्तादिभिस्तत्पुनरपि च शिरा यद्दिशातोभियाति।

पाषाणाद्यंतरं यन्मधुरममधुरं शर्करा वाप्यधस्यात्तत्सर्वं संब्रुवेहं सकलजनहितं वीक्ष्य शास्त्राणि शश्वत्।।2।।

साधारणाननूपांश्च जांगलान्पर्वतान्वितान्। देशान्निमित्तजान् ज्ञात्वा वदेत्सर्वं विचक्षणः।।3।।

आनूपे निकटे यथोक्तमतिभिर्नीरं भवेज्जांगले दूरे स्याच्च मरुस्थलेशमनिकरे देशे सशैले पुनः।

एतन्निश्चितमस्ति यद्यपि तथाप्याख्यामि भूपाग्रहात्प्राक्शास्त्रोदितमार्गमात्रविशदं साधारणे पर्वतः(ते?)।।4।।

दिग्विदिक्स्थाः शिराश्चाष्टौ श्रेष्ठान्या नवमी शिरा। अयस्थितोर्ध्द(र्ध्व?)गा या तु साऽजयांबुवहा स्मृता।।5।।

पर्वताद्वृक्षमूलाद्वा शिराधो याति निझरि। सर्वाःशिराःक्वचित्सिध्दा दृश्यन्ते कंदरासु च।।6।।

खन्यमानेतिकठिना मृच्च पाषाणसंनिभा। पर्पटाश्माभिघातस्यास्त(त्त?)दधःस्याज्जलं बहु।।7।।

अथ जांगले योगः।

जलाष्टा(श?)यविवर्जिते भवति वेतसो द्रुर्यदा करत्रयमितक्षितौ वरुणदिग्गताधःशिरा।

तदा मुनिकरैर्मिता करयुगे तथो(था?) सार्धके शिलीकनकसंनिभा तदनु पर्पटस्तोयगः।।8।।

वारुण्यां त्रिकरेण सार्धपुरुषद्वन्द्वे शिरा श्यामला यत्रोदुंबरिका भवेन्नरमितेऽधःस्था सिता शर्करा।

पूर्वस्यां त्रिकरे भवेज्जलशिराऽधःस्याश्रिते (?)पुंद्वये लोहाभात्वथ पांडुरा च मृदनुस्यात्पुंस्त्रि(?)भिर्दर्दुरः।।9।।
अत्र योगद्वयं।
वल्मीकोर्जुनसौम्यगो यदि भवेद्धस्तत्रये चार्जुनाद्वारुण्यां पुरुषैस्त्रिभिःपरिमितं सार्धैर्जलं निश्चितम्।
श्वेताभार्धनरे सुधूश(स?)ररुचिर्गोधा ततःशर्करा पीता चानुसिता जलस्य निकटे तत्रास्ति सस्वादु च।।10।।
जम्बूवृक्षसमीपगाच्च मधुरं वल्मीकतो दक्ष(क्षि)णे नीरं स्यात्पुरुषद्वयेऽर्धपुरुषे पारावताभा दृषत्।
वल्मीकाद्बदरी जलेशदिशि चेत्तोयं तदा पश्चिमे वक्तव्यं पुरुषैस्त्रिभिः करयुगे गोधा त्विति प्रत्ययः।।11।।
अत्र योगद्वयम्।
वल्मीके यदि सिंदुवारविटपस्तद्दक्षिणे पुंमिते तोयं सार्धनरद्वयेऽथ कपिला मृच्छर्कराच्छा क्रमात्।
कोलश्चेन्मिलितः पलाशतरुणा हस्तत्रये पश्चिमे स्यात्सार्धत्रिनरेष(ष्व?)धःक्षितितलं श्वेतारुणा शर्करा।।12।।
अत्र योगद्वयम्।
बिल्वोदुंबरिके यदा च मिलिते हस्तत्रये दक्षिणे नीरंस्यात्पुरुषत्रयेर्धपुरुषे नीचैस्तदा दर्दुरः।
काकोदुंबरिका यदास्ति निकटे वल्मीकतःपश्चिमे तोयं पुंत्रितये ततोर्धपुरुषे गौरा दृषन्मृत्तया।।13।।
अत्र योगद्वयम्।
प्राक्व(?)पिल(?)तरोःशिराल्पजलदा हस्तत्रयेऽधो मता क्षारा लोहसमा च मृत्त्वथ शिरा शोणोत्तरे तन्मिता।
वल्मीकः कलिवृक्षतो यमदिशि स्यात्पश्चिमे पुंमिते तत्पश्चात्स यदा तदार्धसहितैःपुंभिश्चतुर्भिःशिरा।।14।।
अत्र योगत्रयम्।
सद्माऽहेश्च करंजदक्षणगतं हस्तद्वये तद्दिशि स्यात्सार्धे पुरुषत्रयेऽर्धपुरुषे कूर्मे त(?)तो द्वे शिरे।

कौबेर्यां मधुकात्तदस्ति सलिलं चेदुत्तरे पश्चिमे सर्पस्तत्र पुमर्धके च धरणी धूम्रारुणःप्रस्तरः। ।15। ।

अत्र योगद्वयम्।

वल्मीकश्च कपित्थकात् यमदिशि स्याद्दर्दुरोधस्तरोःप्राच्यां सप्तकरेऽथवोत्तरगतं पुंभिश्चतुर्भिर्जलम्।

सर्पःकर्बुरको भवेच्च पुरुषे मृत्स्ना च कृष्णा ततःपाषाणःपुटकःशिराद्वयमथो सौम्यां जलेनाश्रयः। ।16। ।

वल्मीकोत्तरतो यदास्ति तिलकस्तत्रैव दूर्वाःकुशाःस्निग्धाःपंचकरैर्मिता त्वथ शिरा तत्पश्चिमे पूर्वगा।

वल्मीको यदि नालिकेरविटपी वा तालवृक्षास्तदा पश्चात्षट्करतो जलं (सु?)मधुरं पुंभिश्चतुर्भिर्मितम्। ।17। ।

अत्र योगद्वयम्।

वामेश्मंतकतो भवेच्च बदरी वल्मीकिका वा यदा प्राच्यां षट्करतो जलं त्रिपुरुषैःसार्धैश्च चिह्नानि चेत्।

कूर्मःस्यात्प्रथमे ततश्च पुरुषे पाषाणको धूसरो याम्यां त्वाद्यशिरापरोत्तरगता तस्या अधः साक्षया। ।18। ।

हारिद्राद्वामभागे फलि(णि?)निलयमधो तस्य हस्तत्रये प्राक् तोयं स्यात्पंचपुंभिःसिततमभुजगः पुंमिते पीतमृत्स्ना।

भूमिःकृष्णा(?)ततो वै वरुणदिशि शिरा तत्पुरो दक्षिणस्यामौषध्यो वा जलं स्यात्तरुतृणलतिका(सृ?) तत्र तोयं समीपे। ।19। ।

अत्र योगद्वयम्।

भार्ङ्गी दंती रुदंती तृ(त्रि?)वृदसितदलो लक्ष्मणा मालिका वा तत्याम्ये तोयमस्ति त्रिनरपरिमिते स्निग्धपत्रेन्यवृक्षे।

नम्रैका यत्र शाखा भवति च तदधस्तत्प्रमाणं जलं वा स्निग्धाःखर्वास्तया स्यात्सुविकटविटपालंबशाखाश्च यत्र। ।20। ।

अत्र योगद्वयम्।

भूमिर्गंभीरशब्दं जनयतिचरणैराहता पुंत्रयात्स्यात् खर्जूरी वक्रशीर्षा त्रिनरपरिमिते पश्चिमे तत्र तोयम्।

पुष्पैःश्वेतैःपलाशो भवति यदि तदा कर्णिकारोथ कोलःसव्ये हस्तद्वये तत्सुरवसतिचमत्कारिनश्येत्त्रिवर्षात्। ।21। ।

अत्र योगद्वयम्।

सोष्मो धूमो यदि स्यात् द्विपुरुषमितितस्तत्र वारिप्रवाहो भूमेर्नीचैस्त्वधस्थं द्विनरमिति पयः पांडुरीभूय नश्येत्।

आचार्यैर्भूरियोगा इह च कथिता (?) ग्रंथबाहुल्यभीत्या व्याख्यातास्ते मयाल्पाःसलिलविरहिते जांगले भूमिभागे।।22।।

इति जांगलदेशभागः।

B

अथ मरुदेशे।

नूनं चिह्नैःसलिलमधुना ज्ञायते भूमिमध्ये सम्यक्क्षारं मधुरमधुरं सन्मुनेःसंमतैर्यैः।

लोकानां वै मरुनिवसतां स्याद्यथा शर्म सश्वत् तस्मिन्प्रायःकरिकरनिभा पुष्कलास्याच्छिरायाः।।1।।

वल्मीकःसौम्यगश्चेदथ मधुरजलं स्यात्करीराच्च याम्यां पानीयंपङ्क्तिपुंभिःप्रथमनरमिते पीतवर्णोस्ति भेकः।

रोहीतद्रोश्च पश्चादहिगृहमपि चेत्तत्त्रिहस्ताज्जलं स्यात् पुंभिर्नीरं द्विषड्भिः सल(व)णमथ(?)शिराः पुष्कलाःपश्चिमस्थाः।।2।।

अत्र योगद्वयम्।

वाल्मीको गौरवर्णो यदि भवति ततःपश्चिमस्यां समीपे पुंपंचाधःशिरा वै शशिदिशि च शिली पुंमिते मृच्च पीता।

वल्मीकः पीलुपूर्वो यमदिशि पुरुषात्सप्तपुंभिश्च तोयं श्वेतःश्यामो हि-(?)द्ये बहुलसलवणं पुंसि हस्तप्रमाणम्।।3।।

अत्र योगद्वयम्।

ईंद्रद्रोःप्रागहिगृहमतःपश्चिमे हस्तमात्रे तोयं पुंभिर्दशयुगमितैःपुंमिते गोधिकास्ते।

निःपत्रद्रोर्भवति मिलिता कंटकारी त्रिहस्ते वारुण्यां स्यात् धृतिकरमितैरीशगाढ्या शिरा चेत्।।4।।

अत्र योगद्वयम्।

रोहीतःस्यादबदरमिलितः पीलुना वै त्रिहस्ते तोयं पुंभिर्नृपपरिमितैर्वृश्चिकोर्ध्दे नरे च।
श्वेता मृत्स्ना तदनु च मिष्टा------(?) --(?)।।5।।
कर्कंधुश्चेदभवति मिलितःपीलुना वै त्रिहस्ते प्राच्यां तोयं बहुसलवणं विंशतिभ्यश्च (?)पुंभि;।
विल्वःस्याच्चेत्ककुभमिलितो वा करीरो द्विहस्तात्पश्चान्नीरं बहुलमधुरं तत्त्वसंख्यैश्चा पुंभिः।।6।।
अत्र योगद्वयम्।
पंचैकस्याः क्वचिदपि यदा संति---वल्मिकश्चेत् मध्यश्वेतो नरपरिमितं पंचपंचाशदंबु।
वल्मीके चेदुपरि च कुशाःपांडुरा वाथ दूर्वास्तस्याधःस्थं भवति सलिलं त्वेकविंशैश्च पुंभिः।।7।।
अत्र योगद्वयम्।
वल्मीकेषु त्रिषु परिवृतोप्यन्यवृक्षैश्च मध्ये ही-(?)तश्चेदभवति पुरुषैः षष्टिभिःपीतमृत्स्ना।
तदवारुण्यां नृमितसिकताधः समीयुक्पलाशात् ---(?)।।8।।
अत्र योगद्वयम्।
वल्मीकेनावृतमथ भवेच्चेत्तरो(?)हीतकात्प्राक् पुंसप्तत्या सलिलममलं भूरिसस्वादु तत्र।
निंबःस्निग्धो द्रवति च रसं तत्र नीरं समंतात् चत्वारिंशन्नरपरिमितं भूरि चाच्छं सुगंधि।।9।।
अत्र योगत्रयम्।
वल्मीकाद्दक्षिणस्यां यदि भवति शमा ग्रंथिभिर्भूरि युक्ता तद्वारुण्यां शतार्धैर्जलमितिमधुरं पुंभिराद्यैःप्रदिष्टम्।
श्वेतैःस्यात्कंटकैः सा यमदिशि पुरुषैर्वारि वाशीतिसंख्यैःसर्पोर्ध्दे पुंसि नीपोहिभवनमिलितःपंचविंशैर्नर(रै?)स्तत्।।10।।
अत्र योगद्वयम्।

या सा(?)स्निग्धा बहु भुवि यदा पंचविंशैर्नरैःस्यात् तोयं कृष्णा(?)त् त्रिपुरुषमधो मृत्तिका पांडुरा वा।
पुंसप्तत्या भवति च महानिंबतो वामभागे पानीयं स्यान्मृदुघनदलात्सुस्वरास्तद्विहंगाः।।11।।
अत्र योगद्वयम।
गुल्मौषध्यःसुहरितदला यत्र वा नीपशिंपास्तत्राम्बु स्यात्तिथिनरमितं तत्र सप्पो(?)थ देवः।
एवं किं(चित्?)मरुभुवि मया प्रोक्तमन्यच्च लोकादन्यग्रंथादपि सुचतुरै रूहनीयं च शश्वत्।।12।।
इति मरुदेशविभागः।

C

देशे नूपे हरितजलजा औषधीगुल्मवल्यो भूमिःसा-(र्द्रा?)मशकसहिता वीरणंवोलपावा(?)।
तोयं तत्र प्रचुरमधुरं पुंमिते धःस्थितं स्यान्निम्ना भूर्वा(?)त्रिकरपरिमितं तत्र तोयं प्रदिष्टम्।।1।।
दंती रुदन्ती तृ(त्रि?)वृता शिवा वा स्यामाषुपर्णी(?) गरुडाशुवेगा ज्योतिष्मती व्याघ्रपदी वराही यत्रास्ति तत्राम्बु समीपवर्ती(र्ति?)।।2।।
माषच्छदागुंद्रककोकिलास्यः(?) सलक्ष्मणालिदलैडुकीव्या(?)ब्राह्मी च पिंडारकशारिवाखे(?) नलतृणं यत्र जलं समीपे।।3।।
स्निग्धद्रुमाणां निकरे लताभा याम्ये जलं भूरि चतुःकरैःस्यात्।द्रोण्यां च निम्ना हरिततृणा भूः ससैकता नादवती जलाढया।।4।।
आनूपदेशसमीपवर्ति (?) सुनिश्चितं भूरिजलं च यस्मात् ।अतो हि चिह्नानि च भूरिकानि(?) किंचिल्लिखित्वा समुपेक्षिती(ता?)नि।।5।।
इति अनूपदेशविभागः।

D

देशे साधारणे तोयं सर्वत्र परिकीर्तितम्।अर्वाग्दशकरात्तत्र चिह्नैरंति च भूरि तत्।।1।।
पार्वतीयेषु देशेषु त्रयं संभवति ध्रुवम्।ज्ञात्वा तद्देशमानं च वदेत्सर्वं विचक्षणः।।2।।

E

सारस्वतोक्ता विशदाःकियंतो मयाथ योगा लिखिता विचार्य। उक्ता वराहेण च ये च वान्यैर्देशे ब्रुवे हं खलु पार्वतीये। ।1। ।

बोधिद्रुमोदुंबरिकापलाशन्यग्रोधयोगश्च मिथो यदि स्यात्। पुंभिस्त्रिभिस्तत्र जलं च तेषामधस्तले जांगलके च भूरि। ।2। ।

स्निग्धाश्च निःछिद्रदला यदा स्युरनोकहा गुल्मलताःसदुग्धाः। चित्रस्वनाःपक्षिगणा वसंति तत्रांबु मिष्टं निकटे प्रदिष्टम्। ।3। ।

खर्जूरिजंबूशतपत्रिनीपाः ससिंदुवारावटनक्तमालाः। औदुंबरी सैव च काकपूर्वा बिभीतकस्तत्र जलं त्रिपुंभिः। ।4। ।

पुष्पप्रधानास्तरवो लता वा जात्यादयः कुब्जकचंपकाद्याः। स्याद्दाडिमीनिंबकबीजपूराः फलान्वितास्तत्र जलं निरुक्तम्। ।5। ।

तालद्रुमो यत्र च नालिकेरी सत्कांचनारस्त्वथ वेतसो वा। अन्योपि वा पर्वतमूर्ध्नि वृक्षः स्निग्धश्च तत्रास्ति जलं प्रभूतम्। ।6। ।

उक्ताः पुरा निर्झरसंज्ञका या देशे भवेत्सा खलु पार्वतीये। पाषाणसंधेर्द्रुममूलतो वा सिध्दौ(?)व निर्याति न तत्र मानम्। ।7। ।

अनूपदेशे त्वथ पार्वतीये शिरोद्भि (?) भूरिजला च द्रृष्टा। तीर्थेन्यदेशे पि च देवताग्रे भूमेरधस्तात्क्वचिदूर्ध्वगामी। ।8। ।

प्रागुन्मुखोदुंबरज्भां (भां?)जनाभा वैडूर्यकावत्द्युतिमौक्तिकाच्छा। पलालधूम्रा कपिला शिला या तस्याःसमीपे बहुतोयमस्ति। ।9। ।

कौशेयमाक्षीकघृतोपमा या पारावतेंदुप्रतिभा शिला या। तत्रास्ति तोयं क्षणमेति शीघ्रं शिलाथवा या गगनान्विता स्यात्। ।10। ।

सशर्करा नीलमृदोपयुक्ता कृ(ष्णा?) च मृद्यत्र सशर्करा वा। गोधूमभा मृत्सिकता च यत्र पीताथवा मृन्मधुरांबु तत्र। ।11। ।

ताम्राच्छभा शर्करयान्विता या कषायमल्पं सलिलं च यत्र। त्वापांडुरा या लवणेन तुल्यं ----------------------------------(?)। ।12। ।

गुल्मद्रुवल्यःकृशरूक्षसूक्ष्मसछि(च्छि?)त्र(द्र?)पत्रा न च तत्र नीरम्। श्रीपर्णिसर्जोर्जुनशाकबिल्वाः सशिंशिपाः पार्थधवाश्च यत्र। ।13। ।

दूर्वाजंबूकुशपिचुमहानिंबपीलूपवासा प्रावृष्याणामितिरिहजले योगतो जांगले या।

पादोना सा भवति स गिरौ जांगलानूपकेध्र्दा वानूपे सा मुनिभिरुदिता हस्तमानेन देशे। ।14। ।

उह्यो देशश्चतुरपुरुषैरल्पमध्याधिको वा निर्नीरोयं(?) तदनु च मितिः कल्पनीया तथैव।

उक्तं चिह्नं भवति हि यथा तच्च तत्रैव वाच्यं दूर्वाद्यं यन्मुनिभिरुदितं मानभेदाद्विशिष्टम्। ।15। ।

अस्मिन्नुदर्गलं वाग्भिरुद्घाटितमृषेर्मया। जगद्यनीन्(?)उल्लासः प्रथमः पूर्णतां गतः। ।16। ।

इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे उदर्गलनिरूपणे प्रथम उल्लासः।

द्वितीय उल्लासः।

ज्ञाते जले तत्र जलाशयानि कार्याणि नानाकृतिमानवंति। ग्रामेषु तानीति यथावकाशं स्थानं च मानं च ववर्हिर्यथोक्तम्(?)। ।1। ।

तडागवाप्यावपि कूपकुंडे सदेवखाते कथिते मुनीन्द्रैः। विना प्रमाणेन च कूपिकाल्याकुल्यालवालादि यथेच्छया स्यात्। ।2। ।

वृत्तं चतुःकोणमथ त्रिकोणमनेककोणंत्वथ दंडलंवम्। तथार्धचंद्रं रसधा सरःस्यात् ज्ञेयं प्रमाणं खनितस्य तस्य। ।3। ।

महासरोवृत्तमथार्धचंद्रं भद्रं चतुःकोणमथो सुभद्रम्। नामानि केचित्सरसां वदन्ति बुध्दं न तैर्ग्रंथिरहस्यमत्र। ।4। ।

आकारभेदस्त्रिषु मानभेद एकत्र युग्मे रचनाविभेदः। परस्परं संभव एव तेषां कुंडैः समं लक्षणशं(सं?)करःस्यात्। ।5। ।

श्रेष्ठं सरो दंडसहस्रकेन मध्यं तदर्धेन तदर्धकेन। कनिष्टमेतानि यथावकाशं मानाधिकाल्पानि भवन्ति स(श)श्वत्। ।6। ।

गिरिद्वयोरंतरबध्दपालिर्द्रोण्यां गिरेरग्रविशालभूर्वा। अल्पव्ययेनैव महान्स्तडागो भवेत्तदा संततभूरितोयः। ।7। ।

अग्रे यदा भूः पृथुलासमंतादुच्चाजलस्यागमनं बहु स्यात्। अल्पांबुतो निर्गमभूश्च तत्र पालौ कृतायां हि महत्सरः स्यात्। ।8। ।

आपालिशीर्षं धरणीतलाच्च सोपानपंक्तिः(क्तिं?) विदधीत धीमान्। पालेश्च दाढर्यार्थमिह प्रलेपः कार्योथवा ह्यंतरगः सुधायाः। ।9। ।

निम्ना धरित्री परितोंबुपूर्णा भवेत्स्वतःसिध्दतडाग एव। मानं न चात्रास्त्यथ मानहीनं स्वल्पं च वेसंतकगर्क्षकाद्यम् (?)। ।10। ।

तडागमध्ये त्वथ भूपतीनां भवन्ति केलीनिलयानि तीरे। नोस्त्तत्र कार्या जलकेलिसिध्द्यै मार्गश्च तेषां वत सेतुनी वा। ।11। ।

नंदात्रिकूटैकमुखी च वापी भद्रा च षट्कूटयुता द्विवक्त्रा। जया त्रिवक्त्रा भवकूटिकास्यैश्चतुर्भिरुक्ता विजयार्ककूटा। ।12। ।

विशालसोपानयुताथ नालिः कार्या समाध्दर्ाद्विगुणा च तस्याः। साध्दर्ाथवा कूटयुतापि मध्ये समंततस्तोरणकेतनाढया(?)।।13।।

द्विमुखो विजयः प्रां(प्रा?)तो दुंदुभिश्च मनोहरः। कूपाश्चूडामणिभ(र्भ?)द्रो जयो नंदोथ शंकरः।।14।।

आरभ्य यावच्च चतुष्करं ते व्यासे क्रमादेककसाभिवृध्द्या। भवन्ति गर्तानि च कूपिकाश्च कुल्यालवालादि विनैव मानम्।।15।।

कूपस्य नीचैर्यदि वालुका स्यात्सारद्रुकाष्ठैःकगरादिभिश्च। स्थाप्याथमंवीहपुषादिभिर्वा(?) यथा न रुध्द्येत शिरा जलस्य।।16।।

ग्रामस्य कूपो यदि मुख्यभूतो जलाशयःत्येन---(?)कार्यः। विदिग्गतो दाहकरः क्रमेण वालावलानाशकरः सभीदः(?)।।17।।

शिरा यदा नास्ति दिशासु यत्र कूपो विदिक्स्योपि न दोषकारी। ग्रामाद्यदा दंडसहस्त्रे(स्त्र?)के वा वृक्षादिसेकाय न दोषदोसौ।।18।।

भद्रं सुभद्रं परिघं च नंदं कुंडं चतुर्ध्दा चतुरस्रमाद्यम्। भद्रैर्द्वितीयं तृतीयं सभिंद्र(?) मध्ये चतुर्थं प्रतिभद्रयुक्स्यात्।।19।।

कराष्टतो हस्तशतानि तानि चतुर्मुखानि(?) तु चतुर्दिशासु। मध्ये गवाक्षैःसहितानि कोणे शालाचतुष्कादियुतानि कुर्युः।।20।।

अगाधगाधं स्वत एव सिध्दं तदेव खातं विविधाकृतिः स्यात्। यथास्ति तत्तस्य तथैव कार्यं शिलासुधाभिश्च निबंधनं वै।।21।।

शिला यदा याति च वापिकादौ निखन्यमाने कठिना मृदुर्वा। तस्याः परीक्षार्थमुनिप्रदिष्टान् (?) वर्णानिदानीं कथयामि स(श?)श्वत्।।22।।

ताम्रान्विता ताम्रनिभा विचित्रा विंद्वन्विता मौक्तिकहेमवर्णा। मृगोपमोष्ट्रस्य नखानुरूपा चंद्रातपाभाऽग्निनिभार्कवर्णा।।23।।

भस्मांजनाभा स्फुरि(स्फटि?)कोज्वला वा नीलद्युतिःपांडुरभा शिलायाः। वर्णैर्विचित्रा हरितालभा वा याम्या(?)नना याति न भेदमाशु।।24।।

शिलाप्रभेदाय च टंकुकानां वक्ष्ये ह्युपायान्विशदान्सुभूरि। यैरौषधैस्तोय इह प्रदत्ते वक्रं न कुंठं भवति प्रहारैः।।25।।

प्रज्वाल्य काष्ठैः सलिलेन सिंचेत्पलाशजंबूधवसादराणाम्। शिरीषवंवू(जू?)लकतिंदुकीनां भल्लातचिंचाखदिरादिकानाम्।।26।।

कांजिकेबदरतक्रकुलत्थाः सप्तरात्रमथ योजयेदथो। वह्निना सुपरितप्तशिलायाः स्फोटनं भवति तत्परिषेकात्।।27।।

तप्ता शिला चूर्णजलेन सिक्ता पुनः प्रतप्ता पुनरेव सिक्ता। तथा शरक्षारजलेन सिक्ता विदीर्णतामेति विनिश्चयोयम्।।28।।

शिला सुतप्तीगुडसर्जिकाभिर्निशाकणासार्षपतैलतोयैः। सकांजिकैर्या कठिनाभिषिक्ता स्फोटं प्रयात्यल्पपरिश्रमात्सा।।29।।

निंबवल्कलपत्राणामपामार्गस्य भस्मना। गुडूच्या तिलनालानां भस्मना तिंदुकस्य च। ।30। ।

गोमूत्रेण कृतः सेकस्तत्र पाषाणभेदकः। सतैलतक्रतोयेन गुडसिध्दार्थसंवरैः। ।31। ।

अवोर्ब्जि(?)षाणार्कपयःशिखायाःपारावताद्योः शकृताथ लिप्ते। वक्रं न कुंठं भवतीह तैलतक्रे च पातेश्मनि टंकुकानाम्। ।32। ।

टंकस्य वक्रं परिताप्य तक्रतैले निमुक्तं दृढतां प्रयाति। भृंगारकस्याथ रसेन तैले क्षिप्रे तथा (क्षिपेत्तया?)तद्गुडतैलमध्ये। ।33। ।

क्षारे कदल्या मथिते दिनोषि(?)तत्पायितं(?)लोहमयास्त्रटंकुकम्। न भंगमायाति च लोहदारणे न कुंठभावं भजते शिलातले। ।34। ।

सुरायवक्षारगुडार्कदुग्धे संकोलतैलेंबुयुतेनुपाते। शस्त्रे शिलालोहविदारणे वै न कुंठतां याति च तस्य वक्र(क्त्र?)म्। ।35। ।

क्षारं पयो यत्र च तत्र कूपे करोति मिष्टं खदिरं सचूर्णम्। यत्राविलं तत्र पलाशभस्मक्षेपात्पयो निर्मलतां प्रयाति। ।36। ।

भवति ककुभमुस्तोशीरधात्रीफलानां कतकफलसमेतं लोहराजादनानाम्(?)। सलिलमपि च चूर्णे वापिकादौ हि मुक्ते मलिनकटुकुगंधमिष्टमच्छं सुगंधम्। ।37। ।

पयसि सलिलपथ्या कुष्ट(?)मेलां कुगंधौ कनकफलसुचूर्णं प्रक्षिपेदाविले वै। पयसि खदिरसारं श्रीफलेनाथ सार्ध्दं भवति मधुरमाशुक्षारमंभश्च कूपे। ।38। ।

उल्लासो द्वितीयो विश्ववल्लभे पूर्णतां गतः। वास्तुशास्त्रस्य संवादीजलाशयनिरूपकः। ।39। ।

इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे जलाशयनिरूपको द्वितीय उल्लासः।

तृतीय उल्लासः।

जांगलानूपसामान्यस्वभावात् त्रिविधा धरा। रसैश्च षड्भिः सा भिन्ना ज्ञेयास्तद्वर्णतो रसाः। ।1। ।

मलिना पांडुरा भूमिःश्यामला धवलारुणा। पीता मिष्टाम्ललवणकटुतिक्तकषायिका। ।2। ।

क्रमेण च रसास्त्वत्र ज्ञेया जीर्णमतं त्विदम्। मृत्तिकास्वादनात्ते च ज्ञायंते मे मति ध्रुवम्।।3।।

वल्मीकगर्तपाषाणबहुलादूषराशुभा। दूरोदका शार्करिला सविषा तरुरोपणे।।4।।

यस्मिन्देशे तुषारेण दह्यन्ते वल्लरीद्रुमाः। बिंबिकाकंटबहुले न कुर्यात्तत्र वाटिकाम्।।5।।

मृदुःसमासन्नजला हिता भूस्तरुरोपणे। तत्रारामश्च कर्तव्यो लोकद्वयहिताय च।।6।।

सप्रस्तरा वा मृदुलाथवा या प्रतप्तजांबूनदभा धरित्री। तस्यामयत्नेन च गुढ(ल्म?)पुष्पपुंनागराजादनचंपकाश्च स्युः(?)।।7।।

आनूपजाःस्युर्मुचकुंदजातीश्रीखंडिकाकेतकिकेतकांबु। रंभाश्वमारो लकुचोपि जंबू मध्वादि चान्ये द्रुमवल्लिगुल्माः।।8।।

रोप्याश्चंपकपाटलाम्रबकुलाशोकाश्च साधारणे कोलोदुंबरनिंबपिप्पलवटा ग्राम्याः सचिंचाशनाः।

अक्षाक्षोटमधूकशिग्रुकमहानिंबार्जुनाद्या द्रुमा दाडिम्यादिफलप्रधानविटपाः पुष्पप्रधाना लताः।।9।।

धवखदिरपलाशावंशधात्रींगुदीकाःशिवनिकरभशाकाशल्लकी सप्तपर्णः। सुरतरुरजनीकास्तिंदुकीजातिकाद्या व्रततिविटपवृक्षा जांगले ये प्रशस्ताः।।10।।

उक्ताःकियंतोपि मयात्र वृक्षा ऊह्यास्तथान्ये चतुरैश्च पुंभिः। क्षितिस्वभावादचिरेण वृध्दिं प्रयान्ति ते पुष्पफलानिदध्युः(?)।।11।।

देवप्रभावाध्दनिनां नृपाणामतीवयत्नादहितप्रदेशे। वृध्दिं समायान्ति लताद्रुमाद्या भवन्ति ते पुष्पफलाक्षियुक्ताः।।12।।

बीजोद्भवाःकांडभवाश्च चान्ये कंदोद्भवा गुल्मलताद्रुमाद्याः। उक्तास्तथान्येपि च बीजकांडभवा विभेदं कथयामि तेषाम्।।13।।

चिंचाम्रचंपकमधूककपित्थजंबूपुंनागबिल्वबकुलाशनकांचनाराः। सक्षीरिकामुपनसाक्षकनालिकेरीतालादिकाः सतिलकाः खलु बीजजाः स्युः।।14।।

जंबीरनिंबुकसदाफलबीजपूरनारिंगसेवकरमर्दकचंपकाद्याः। कर्णीविदामकमलाख्यकपांडुरागाःश्यामातिमुक्तकमुखा इह बीजजाःस्युः।।15।।

जातीगुलालतरुणीनवमल्लिकाश्च मल्लीजपातरलकुंदशिखंडिकुब्जाः। तांबूलिकासलिलकेतकिकेतकाद्याः कांडोद्भवा इह मया कथिताःकियंतः।।16।।

बिंबास्नुहीचंद्रकसिंदुवारश्रीखंडिकाश्वत्थवटाःपलाशाः। सदाडिमप्लक्षमुनिद्रुवंशा द्राक्षादिकाःकांडजबीजजाःस्युः।।17।।

कंदोद्भवाःकुंकुमशृंगवेरविदारिकासूरणपीतिकाद्याः। एलांवुजानीति च बीजकंदसमुद्भवानीति वदंति धीराः। ।18। ।

रंभादिकाःसंति च कंदकांडजातास्तथान्येपि समूहनीयाः। आरामयोग्याश्चतुरैश्च पुंभिर्द्रष्टा च पृष्ट्वा वनपालिनो वै। ।19। ।

गृहे निषिध्दा विटपा आसन्ना अपि तानहम्। विहिता अपदिग्भिदाविशेषात्कथयामि तान्। ।20। ।

गृहस्य बाह्या म(अ?)थ बीजपूरजंबूहरिद्राबदरीपलाशाः। श्लेष्मातचिंचार्जुनकांचनारकरंजकाःस्युर्न शुभाश्च साक्षाः। ।21। ।

वर्ज्या गृहे तन्निकटेपि वृक्षा विशेषतःकंटकिनःसदुग्धाः। फलैर्विहीनाःखलु कृंतनीया आत्मोद्भवाश्चापि सुखार्थिपुंभिः। ।22। ।

फलप्रसूनैरहिताश्च सर्वे वन्यास्तथांकोलविभीतकाद्याः। एरंडसिध्दार्थकनीलिकापि न वापनीया गृहवाटिकायाम्। ।23। ।

पुष्पप्रधानाः सकलाश्च वाट्यां फलप्रधानाःप्रथिताश्च सार्काः। लताद्रुवल्ल्यौषधयःसगुल्मा वाप्यास्तथान्ये गृहवाटिकासु। ।24। ।

शुभःप्राच्यां वटो याम्यां तथोदुंबरिका गृहात्। वारुण्यां पिप्पलःप्लक्षः सौम्यास्यां न विवर्जयेत् (?)। ।25। ।

गृहांतिक्षिन्ना(?)यदि वा न दक्षे ग्रामाद्वहिर्वा यदि वाटिका स्यात्। तद्रोपणेयं नियमोथ दूरे रोप्या निषिध्दा अपि तत्र सर्वे। ।26। ।

आग्नेययाम्यनैऋत्यनिषिध्दा वाटिका पुरात्। सर्व (पूर्व ?)पश्चिमसौम्येषु शुभा मध्ये शमारुते। ।27। ।

दुर्गे यथामानयथावकाशं कुर्याच्च साधारणवाटिका च। सर्वे द्रुमास्तत्र च रोपणीया ग्राम्याश्च वन्या अपि नास्ति दोष;। ।28। ।

तस्यां चंपकमालतीकुरबकानिर्मालिकायूथिका श्रीखंडीकण(र ?)वीरकुंदबकुला वासंतिका सेवती।

कर्णीकुब्जगुलालहेमसुमना सिंदूरिका केतकी बंधूको मचकुंदकेतकिजपा निःमल्लीमु(?)किंशुकः। ।29। ।

इति पुष्पप्रधानाः।

मालूरोबदरीरसालकरका--(?)शनाश्रीफलाश्चिंचामर्दकिनिंबुपूगफिरसानूता(?)वटाश्वत्थकाः।

खर्जूरीपनशःकपित्थकरहापथ्याश्च सांजीरका वंशोदुंबरिशालतालजटिला रोहीतकःपाटला। ।30। ।

राजादनाशोककदंबजंबूर्जंभीरनारंगसदाफलाद्याः। वीजाढ्य(?)रंभाम्लकदाडिमी च सनालिकेरीकमलाख्यकालाः। ।31। ।

आषोटपिस्तौ लकुचो विदामा -[आलेमूलखननेरंगार्थम्(?)]- तांबूलकैलाशपतत्रिमृद्वी।

अन्येपि रोप्यास्तरवःसगुल्मलतान्विताःपुष्पफलोपभोग्याः।।32।।

करमर्दकवंशादीन्प्राच्यां वै रोपयेद्बुधः। द्राक्षाप(पा?)रावतान्याम्यां कपित्थाश्चै(व?) पश्चिमे।।33।।

सौम्यां लोकादिकानन्यान् यथावर्गं नियोजयेत्। वाट्यामुत्कांतरे तद्वत् श्रेष्ठमध्याधमान् तरून्।।34।।

भूपरिक्षाद्वविहितस्य निरूपकः(?)। उल्लासस्तृतीयःपूर्णो यातोयं विश्ववल्लभे।।35।।

इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे तृतीय उल्लासः।

चतुर्थ उल्लासः।

पयोदकालोखिलबीजवापे वृक्षादिसंरोपणके प्रशस्तः। तत्रांबुदे वर्षति रोपणीया शरद्वसंतौ भवतीह मध्यमौ (?)।।

हिमागमो ग्रीष्म उभौ निषिध्दौ वापेथ ज्येष्ठः कथितश्च केचि(कैश्चि?)त्। सर्वेपि काला विहितास्तदानीं यदातियत्नो वनसेचने स्यात्।।2।।

मृद्वी च साधारणभूः प्रशस्ता सर्वाघ्रिपारोपणबीजवापे। अथो विशिष्ठद्रुहिता च यादृक् वर्णादिभेदेन च सा निरुक्ता।।3।।

उदुंवरीतिंदुकवीरचिंचा वटाद्यराजादनचंपकाद्याः। सवंशजंबूपिचवो धरायां सप्रस्तरायामपिसंभवंति।।4।।

ग्राम्या अरण्या अपि ये द्रुमाःस्युर्गुल्मादिवल्ल्योऽश्मविमिश्रभूमौ। न स्युःक्षितावभ्रकमिश्रितायां राजादनाद्या बकुलाःसचंपाः।।5।।

स्वे(श्वे?)ताभ्रका या ष(?)टिकादियुक्ता धरा प्रशस्ता न च धातुयुक्ता। -- --

।।5(?)।।

अजातशाखा विटपाः प्रशस्ताः संजातशाखाः खलु मध्यमाः स्युः। उद्भिन्नपुष्पा अधमाःफलाढ्या न रोपणीया न भवंति यस्मात्।।6।।

ग्रीष्मे सपत्रा निकटेऽभ्रकाले संजातशाखाःखलु रोपणीयाः। वर्षासु सुस्कंधयुता वसंते रोप्या द्रुमा अन्यमतं घनांते।।7।।

निकृंतितसुनिःप(निष्प?)न्नहरिन्माखतिलं च यत्। कृष्टं च बहुधा क्षेत्रं तद्योग्यं वाटिकाविधौ।।8।।

उदेहिकादिकीटानां यदि शंका भवेत्तदा। वापयेदजगंधां वा शतपुष्पां हि तावता(?)।।8(?)।।

गर्तं कृत्वाथवा पूर्वं प्रज्वाल्यापूरयेन्मृदा। करीषेण च बीजानि भावितान्याज्यमाक्षिकैः।।9।।

वापयेत्तानि यथास्थानं गोमये मृदितानि च। विलिप्य तिलबीजद्रुभस्माज्येनाथवा सुधीः।।10।।

बीजमंकोलतैलाक्तं जीर्णमप्याशु रोहति। भवंति द्विदलास्तद्वदेकाहेन च सर्षपाः।।11।।

गर्ते निधाय सिकतामथवा सुपात्रे पूगं सवल्कलमपीह च नालिकेरम्। मासात्प्ररोहति सकृल्लवणांबुयोगाच्छुध्दोदकैःप्रतिदिनं च तथैव सित्तम्।।12।।

अंकोलतैलशकृता पयसा प्लुतं च गर्ते वपेत्सुसिकतापरिपूरितेथो। आखोटपूगतृणराजफलं सुसित्तं खर्जूरिखारिकबदामकनालिकेरम्।।13।।

तृणैःपलाशपत्रैर्वा तावदाच्छादयेद् बुधः। बीजधात्रीं धरां यावदंकुराः संभवंति हि।।14।।

समूलमृत्तिकायुक्तानंघ्रिपांश्च समुध्दरेत्। विडंगघृतमी (मा?)क्षीकलिप्तान् गर्ते निवेशयेत्।।15।।

गोमयालिप्तशाखांघ्रिस्कंधान्नारोपयेत्सुधीः। पूरिते मृत्करीषेण गर्ते सिक्तेंभसा बहु।।16।।

द्रुमा षोडशविंशार्ककरैरंतरिता क्रमात्। मध्योत्तमाधमा उप्ता ज्ञेया जी(ज्जी?)र्णमतं त्विदम्।।17।।

तृणगुल्मलताद्याश्च चतुस्तृ(स्त्रि?)द्विकरांतराः। रोपणीया यथास्थानं वीथीस्वस्तिकमंडलैः।।18।।

बृहद्रुर्म(द्द्रुमा?) विंशतिभिःकरैर्वा मध्यास्तथा षोडशभिश्च रोप्याः। अल्पा अथोर्कैश्च कृतांतरायाः कैश्चिद् व्यवस्थाथ कृता मयैषा।।19।।

कर्णीबदामलकुचाऽम्लकबीजपूराः सदाडिमाःपंचमुनिपंक्तिकरैश्च रोप्याः। चंपादिका मुनिदशार्ककरैश्च चिंचा रसालराजादनकांनृपार्कैः।।20।।

घना न वृध्दिं विटपाः प्रयांति दूरस्थिता वायुविभुग्निताःस्युः। तस्माद्यथाव्यासमवेक्ष्य सर्वे वाट्यां स्ववर्गे खलु रोपणीयाः।।21।।

अशोकपुंनागशिरीषनिंबाःसचंपका स्वस्तिकराश्च वाट्याम्(?)। रोप्यास्त्वतस्ते प्रथमं च मृद्वीजातीफलिन्यादिलताः शुभाःस्युः।।22।।

संक्षिप्य कियतामुक्तो द्रुमाणां रोपणे विधिः। अगमत्पूर्णतामत्र तुर्य उल्लासको ह्ययम्।।23।।

इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे चतुर्थ उल्लासः समाप्तः।

पंचम उल्लासः।

अवृष्टिसिक्तस्य नवांघ्रिपस्य संध्याप्रभाते खलु सेचनं स्यात्। यष्टयादिकं तन्निकटे निषेयं(व्यं?) यथा प्रवाते न विचाल्यतेसौ।।1।।

निखि(ख?)न्य चालवालानि समये परिषिंचयेत्। यथोचितसुमृत्स्नाभिः संपूर्याथ विचक्षणः।।2।।

यदालवाले जलपूरिते वै न शोषमायाति जलं चयामात् (पानात्?)। ताद्वगृविधे तत्त्वरया न देयमजीर्णमस्य प्रवदंति धीराः।।3।।

विनातपं निपत्राणि म्लानानि विटपस्य च। द्रृश्यन्ते सर्वदा ज्ञेयाः क्षुधित(तं?)स्तं (?) परिसिंचयेत्।।4।।

प्रातश्च वर्षासु दिनस्य मध्ये काले सशीते परिषेचनीयाः। प्रगेपराहे(ह्णे?)प्यथवा वसंते ग्रीष्मेथ सायं हि सदांघ्रिपाद्याः(?)।।5।।

सेचनादिविधिः प्रोक्तः कालावस्थादिभेदतः। उल्लासः पंचमश्चात्र ग्रंथेस्मिन्पूर्णतां गतः।।6।।

इति श्रीचक्रपाणिविरचिते विश्ववल्लभे पंचम उल्लासः।

षष्ठ उल्लासः।

प्रचंडवाताच्च हिमाच्च धूमाद्वह्नेःकृमेर्जालकतस्तथाखोः। संरक्षणीयास्तरवो प्रयत्नैरेभ्यो यतःस्युर्विपदोंघ्रिपाणाम्।।1।।

आधारयष्टेः परितश्च रोपाद्वायोर्न भीतिर्भवति द्रुमाणाम्। तेषामथो वाप्यनुकूलदेशे वि(व?)ह्नेर्निरोधादपि धूमरक्षा।।2।।

वह्नेस्तु यत्नःखलु मंडपादौ कुर्याच्च देशे सतृणेथ दावात्। बिलावरोधौषधमंत्रपत्रैराखोःकृमेश्चापि निवारणं स्यात्।।3।।

मंत्रस्तु सारंगपध्दतौ यथा-ओम् स्वस्ति किष्किंधास्थितप्रकटपराक्रमांतर्हिताकंडुलो(खंडलो?)पजीवितस्य हनूमानाज्ञापयति मूषकपतंगपिपीलिकाशलभकरभान्वककीटगंधिकाविंविभिर (रि?)हैवनस्थातव्यं क्रममाणस्य शरीरनिग्रहःसमावर्तयति तस्य वानरसिंहस्य क्रममाणस्य सागरकक्षांतरगतो वायुजीमूत इव नर्दति हुं फट्।।

-त्रे (मंत्रं?)पत्रे समालिख्य जप्त्वा तन्निखनेद्भुवि। क्षेत्रे कीटपतंगाखुपिपील्यादि विनश्यति।।4।।

अल्पद्व(?) वृक्षाणामंतरे क्षेत्रे सघनं वापयेत्सुधीः। शतपुष्पां कुवेराक्षीं ततः कीटनिवारणं।।5।।

अल्पांघ्रिपाणामपि मंडपेन तृणादिभिर्वेष्टनकेन शश्वत्। पात्रादिनाच्छादनकेन कुर्यात्स्वल्पे तुषारस्य च रक्षणं वै।।6।।

चूर्णं तिलानां क्षितिजस्य मूले तयोपरिष्टाद्विकिरेच्च भस्म। यष्ट्याग्रसंबध्दपटैस्तृणैर्वा बर्हेण तज्जालकमार्जनं स्यात्।।7।।

कुट्या(?)थवा कंटकिरोपणेन रक्षा द्रुमानां परिखाविधानात्। कार्यान्यथा वा चतुरैश्च पुंभिः युक्त्या यथाकालमथोखिला वै।।8।।

समाप्तःषष्ठ उल्लासस्तरुरक्षानिरूपकः। विदग्धहृदयाह्लादिग्रंथेस्मिन् विश्ववल्लभे।।9।।

इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे षष्ठ उल्लासः।

सप्तम उल्लासः।

विधाय रक्षां बहुधा तरूणां कुर्यादथो पोषणमौषधाद्यैः। वक्ष्ये प्रयोगान् बहुधानुभूतान्स्तेन्यत्र मांसैर्बहवो निरुक्ताः।।1।।

अथ कुणं (कुणप ?)जलम्।

मेषाजसारंगझषादिकानां मेदोवसस्त्वगृरुधिरं समज्जम्। तोयेन वह्नौ विपचेच्च सम्यक् पक्वे क्षिपेत्क्षीरमनुश्मनीरम्।।2।।

खलिं तिलानां मधु तत्र भांडे घृतं समुत्तार्य च कोश्मदेशे। निधाय भांडे खलु पक्षमेकं तोयं हि तत्स्यात्कुणकं (पं ?)द्रुवृध्द्यै।।3।।

दुग्धोदकं तिंदुकपादपानां प्रियालभस्मापि च नालिकेर्याः। आम्रादिकानां हितमंबु शालेः ---------------------------।।4।।

खर्जूरबिल्वलकुचाशननालिकेराः साक्षोटकाःसतिलसर्षपचूर्णदानात्। वृध्दिं प्रयान्ति पनशाम्रमधूकचंपा व्रीह्यांबुना सखलिना च विनातपर्तुः।।5।।

सर्वद्रुमाणां कुणपस्य सेको हितोस्ति सश्वत्फलपुष्पवृध्द्यै। विशेषतो दाडिमपादपानां धूपोपि हि स्थूलफलाशुकारी।।6।।

मत्स्याज्यत्रिफलालिप्तत्रिफलाज्येन धूपितः। दाडिमो पक्वफलयुक्फलं तस्य बृहद्भवेत्।।7।।

कुलत्यंचूर्णक्वथितांबुसेको वृध्दिंकरो दाडिमपादपानाम्। कार्पासबीजक्वथितांबुसेका मृत्सै(सौ?)रभेयीस(श?)कृतश्च दानात्। ।8। ।

श्विन्नाश्च माषाःसजला निरुक्ता वृध्दौ फलानां जरठामलक्याः। दुग्धस्य सेकात्सकलद्रुमाणां फलं सुमिष्टं भवतीति पक्वम्। ।9। ।

मूले पुरीषे खलु कुक्कुटानां दत्ते निमिश्चालन(?)तोपसिक्ता। अतीव पुष्पानि फलानि धत्ते द्राक्षा सुवृध्दिं व्रजतीह शीघ्रम्। ।16 ?। ।

प्रियंगुसिध्दार्थवचाहरिद्रा विडंगगुंजातिलनिंबकृश्माः(ष्णाः?)। घृताश्वकर्णांबुविलोडिताः स्युर्वृध्दिंदकराश्चंपककेशराणाम्। ।17। ।

स्कंधं च पालालमयो निधाय वचांबुशिक्तो मधुराणि भूरि। फलानि धत्ते पनशोतिशीघ्रं मिष्टानि वृध्दिं व्रजतीह सश्वत्। ।18। ।

कोशातकीपत्रशिफाश्रयाणां क्वायेन कृश्मा(ष्णा?)सहितेन शिक्तः। धत्ते मधूकः कुसुमानि भूरि सुधूपितोप्येष विचित्रयोगः। ।19। ।

यस्याथ शाखाः सुनियम्य बध्दाः स्थूलेन दाम्ना किल कोद्रवस्य। सोल्पोपि धत्ते कुसुमानि भूरि मधूकवृक्षो भजते च वृध्दिम्। ।20। ।

मधूकचूर्णं विनिधाय मूले क्षीराज्यमाक्षीकविमिश्रितं च। भूयोपि शिक्तौ हि कपित्यबिल्वौ मिष्टान्यनस्थीनि फलानि धत्तः। ।21। ।

अजैडकासूकरविड्वि(?)जं (डं?)गकृतोपचारेण च बीजपूरः। भूयोश्वमूत्राविलवारिसिक्तः फलानि धत्ते सुबहूनि सश्वत्। ।22। ।

माक्षीकयष्टीतिलमिश्रनीरसंसेविता स्यात् बदरी फलाढया। कार्पासिकामनि(बीज?) विपक्वतोयसिक्ता सुपुष्पा खलु पाटला स्यात्। ।23। ।

तिलोदकेन चाज्येन मत्स्यमांसोपचारतः। शेफालीपीतिका सिक्ता पुष्पितैकदिना भवेत्। ।23 ?। ।

माषमांसगुडक्षीरक्वायसेकादृभवंति हि। नारंगविटपे स्थूलसुरसानि फलानि च। ।24। ।

कर्कंधुमेथीतिलतक्ररोध्रदध्यारनालांबुनिषेचनाद्वै। प्रियंगुपुंनागकदंबवृक्षान् सुगंधिपुष्पान्कुरुते दशाहात्। ।25। ।

जंब्वाम्राशोकधात्रीककमलख(?)लकुचां लेखयित्वाथ सश्वत् जंबालक्षीररोध्रैः समधुघृततिलैर्मूलदेशे च विध्वा।

पश्चात्संसेचयेत्तान्दशदिवसमयो क्षौद्रदुग्धांबुभिर्वै तेषां पीयूषतुल्यं भवति खलु फलं वंध्यतामागतानाम्। ।26। ।

सतिलगुडविडंगं संनिधायाथ मूले मधुककुसुमचूर्णं पूरयित्वा सुमृद्‌भिः।

बहुकुसुमविकाशी कोलमूलांबुसेकाद् भवति लकुचवृक्षो सौरभाढयो दशाहात्। ।27। ।

वसंते चूतवृक्षस्य परश्च(?) लेखनं हितम्। मंजरीणां विकाशाय मुनिभिःपरिकीर्तितम्।।28।।

कदलीनां हितं भस्म व्रीहिगोमयसंभवम्। शालेस्तुषांबुक्वथितं तृणद्रूणां विशेषतः।।29।।

घृताक्तारक्तमृल्लिप्तः सिक्तो कोलांभसा पुनः। अशोक(कः?)कुसुमाढयःस्याद्यथा कांतापदाहतः।।30।।

कांतामुखासवासिक्तो बकुलः पुष्पितो भवेत्। तिलकश्च तदाश्लेषादशोकस्तत्पदा हतः।।31।।

स्विन्नमाषा-(ज्य?)वल्मीकु (क?)मधुलिप्ता च पद्मिनी। पंकोद्भवा प्रतिदिनं फुल्लांभोजयुता भवेत्।।32।।

सुगंधजलसंसिक्ता निदाघे कुणपांबुना। आसन्नमेघे सुरभिदला स्यात्केतकी भृशम्।।33।।

निखिला द्रुलताः सुरोपिताः सुरभीघृतधूपिताः पुनः। घनगृष्टिवसांबुभिर्मृदा सुभृताश्च फलंति सिंचिताः।।34।।

भग्नं कुंभमुखं मूर्ध्नि दधन्नाम्रातकः सुखी। दाडिमस्तु मृतं चाषं फलाय मुनयो विदुः।।35।।

भिल्लाटमूलयवदुग्धविडंगमिश्रैस्तैलेंद्रबीजमिलितैर्हि जलैः सुसेकः। मूलालवाल इह मृत्सु करीषदानं धूपोपि दोषविगमाय भवेच्च वृध्दै।।36।।

सिध्दार्थाकदलीदलानि शफरीविट्कोलमार्जारयोरेतेषां समभागमाज्यसहितं चूर्णं तरुभ्यो हितम्।

दत्तं धूपविलेपनोपचरणैराप्यायनं रागहृच्छाखापल्लववत्फलैश्च मधुरं व्यालोलपुष्पच्छदः।।37।।

अयं श्लोकः सारंगधरस्य।

विडंगमाक्षीकतिलैः प्रलेपो धूमो घृतस्यापि मृदालवाले। सेको यवक्षीरजलैस्तरूणां वृध्दिदंकरः स्यात्कुणपैः शिशूनाम्।।38।।

उन्मत्तवातारिकमल्लिकाभिः ससिंदुवारैस्तिलमाषयुक्तैः। यवाज्यमाक्षीकपयोविमिश्रैर्धूपोभिलेपः सजलैश्च सेकः।।39।।

सुंठीघृतक्षौद्रविडंगकुष्टैर्लेपोऽथ धूपोपि तुषैः कृमिघ्नैः। सेको जलैःस्यात्कुणपांबुभिर्वा विशेषतः क्षीरतरोर्हिताय

आपूर्यमाणास्तरवः सुमृद्भिर्मूलेजमूत्रैरभिसिच्यमानाः। सुधूपितास्तेन जलैर्निषिक्ताः कुर्वंति वृध्दिं नितरां विरोगाः।।41।।

किट्येणयोर्वसाकोलक्वाथेन परिषिंचिताः। घृतमाक्षीकसिक्तेन स्फीताःस्युर्नीरुजो(जा?)द्रुमाः।।42।।

सिध्दार्थैः फलसंयुक्ताः सेविता गदवर्जिताः। जायंते तरवो नित्यं पत्रपुष्पफलान्विताः। ।43। ।

सितामधुकपुष्पैश्च यष्टीकुष्टाज्यमाक्षिकैः। निक्षिपेद्गुलिका मूले रचिताःसर्वभूरुहाम्। ।44। ।

इति कतिपययोगाः पोषणार्थं मतास्ते --------तेभ्य उह्यास्तथान्ये। विविधजनपदानां ये हिताः पादपानां ------------। ।45। ।

उल्लासः सप्तमःस्पष्टो ग्रंथे स्मिन् विश्ववल्लभे। पोषणादिविधौ भव्यपूर्णतामभ्यगादयम्। ।46। ।

इति श्रीमिश्रचक्रपाणिविरचिते विश्ववल्लभे पोषणविधौ सप्तम उल्लासः।

अष्टम उल्लासः।

अथ तरुचिकित्सा।

तिक्तरुक्षकषायैः स्युःकट्वृश्मलवणैस्तरोः। मधुराम्लस्निग्धलवणैर्वातपित्तकफा(?)प्नुयात्। ।1। ।

नृणामिव तरूणां च वातपित्तकफाद्गदाः। संभवंतीतच्छा(तीतितच्छा?)न्त्यै वक्ष्ये लक्षणमौषधम्। ।2। ।

जलौषधान्नसंपुष्टे जग्धे कीटादिना क्षते। शीतदग्धे ग्निदग्धे च विद्युत्पातहते तथा। ।3। ।

वातभग्ने जरादुष्टे संमर्द्दननिपीडिते। नीते स्थानांतरे वापि निवासे प्राणिनां भृशम्। ।4। ।

विश्रिते पिंसखा(?)रे प्युपचारादिपीडिते। अन्ययौषधा(?)निदाने च क्षुधिते दोषसंभवे। ।5। ।

एभिस्तरूणां विपदः संभवंति विशेषतः। तस्मात्सर्वप्रयत्नेन ज्ञात्वा विधिमुपाचरेत्। ।6। ।

देशांतरोद्भवाःकेचिल्लतावृक्षादिका इह। वापिता रोपिताः सम्वन्न भवंति यतो ध्रुवम्। ।7। ।

तद्भूमिदोषात्कालस्य धर्मवित्पा(?)सतो थवा। सुश्रु(श्रू?)षणापरिज्ञानदेवतावरतो थवा। ।8। ।

अथ वातादीनां लक्षणान्याहुः।

रूक्षोल्पोद्धःकृशो दीर्घो निद्रालुः स्वल्पचेतनः। फलपुष्पानि नो धत्तेऽथवाल्पानि च वातलः।।9।।

विपाकसोश्मैर्हि रसैः कटूक्तैः सस्निग्धमांसक्वथितांबुभिश्च। सेको हितो वातिकपादपानामुध्दूलनं गोमयभस्मनापि।।10।।

निर्गुंडिकारग्वधपंचशाखपत्रांबुतोयैरभिसेचनेन। तन्मूललेपेन तिलान्वितेन प्रयाति शांतिं पवनश्च तेषाम्।।11।।

आच्छादनं तैलखलिप्रदानम् मूले द्रुमाणामजमूत्रसेकः। कुल्माषकच्छागपुरीषचूतत्वगश्वगंधाजलसेक इष्टः।।12।।

वातात्कौक्षं (द्रौक्षं?) च गुडिकाग्रंथयःस्युर्द्रुमेषु वै। गोविट्भल्लातकवसालेपैःकुणपतो जयेत्।।13।।

राश्ना(?)श्वगंधापवनारिनागकणाकषायेण कृतो हि सेकः। सवातिकद्रौ शतपुष्पिकायास्तोयेन वातं प्रबलं जयेत।।14।।

निर्गुंडिकागुग्गुलुशेफसर्प्पिः कुबेरनेत्रासनबीजधूपः। हितो द्रुमाणां पवनात्मकानां मूलेजविष्टाखलिपूरणं च।।15।।

अथ पैत्तिकलक्षणम्।

पांडुपत्रःकृशःपक्षेः(?)सुष्प(शुष्क?)शाखः स पैत्तिकः। आतपासहनोऽकालफलपाकी द्रुमः स्मृतः।।16।।

सस्निग्धशीतैर्मधुरैरसैश्च प्रयाति नाशं सहसा च पित्तम्। शीतांबुसेकैःसुरभीपयोभिर्नूनं द्रुमाणां ससिताविहैः(?) ।।17।।

उशीरमुस्तामधुदुग्धसर्पिःकृपो(तो?)पचारः स(श?)मयेच्च पित्तम्। जंबालषस(?)जालविलेपतो वा द्रूणां सिताक्षौद्रघृताढ्यधूपात्।।18।।

अथ श्लेष्मद्रुमलक्षणम्।

स्निग्धच्छदस्त्वग्विशदाभपुष्पः फलैर्गतस्वादसपिच्छलैर्यः। लतावृतांगःपरिमंडलोसौ चिरप्रवाली कफवान्द्रुमःसः।।19।।

तिक्तोश्मरुक्षैःकटुभिःकषायैः कफो रसैर्नाशमुपैति शीघ्रम्। जलैश्च कोश्मैःपरिषेचितेपि सुखी भवेत् श्लेष्मलपादपो वै।।20।।

प्लक्षार्जुनोदुंबरिसप्तपर्णनिंबत्वचां वै विहितः कषायः। श्लेष्मान्वितानां विहितस्तरूणां तथैव वासाघनरोहितानाम्।।21।।

व्याघ्रीसहचरारिष्टवासाखदिररोहितैः। कृतः क्वाथो हितो द्रूणां श्लेष्मिणां परिषेचने।।22।।

मरुद्भवा(?)मृतावासाव्याघ्रीस्रो(?)हीषनिर्मितात्। क्वाथात्स्वप्रकृतिं याति तरुःश्लेष्मजितो ध्रुवम्।।23।।

लेपो व्याघ्रीरसेनापि मधुकट्फलसंयुतः। घनपत्रकरो द्रूणां सप्ताहात् श्लेष्मिणां हितम्।।24।।

अथ जलसेकाधिक्याजीर्णलक्षणम्।

उन्निद्रता पांडुरता प्रवालहानिश्च शाखाग्रविशोषणत्वम्। जलातिसेकात्सपिपीलिकात्वं द्रूणां भवेन्मत्स्यविगंधता च।।25।।

उल्लिखा(ख्या?)ल्पप्रहारैः सुपरशुजनितैस्तस्य वृक्षस्य मूलाद्विद्वान् विश्राव्य दोषात् जनितमपि रसं तत्प्रमाणानुरूपम्।

पश्चाल्लिप्त्वा बिडंगैः समधुघृततिलैः पूरयेत्त्वालवाले मृद्भिस्तं(?) दुग्धतोयैःसिंचिततनुरथो याति निर्दोषतां द्रुः।।26।।

प्लक्षार्जुनत्वक्भस्मप्रदानं च हितं द्रोरल्पसेचनम्----------? ।।27।।

अथ अन्नाद्यजीर्णलक्षणम्।

खल्वन्नाजीर्णतो द्रूणां पल्लवानामसंभवः। सपिपीलिकता चापि शोष; पत्रेषु जायते।।28।।

त्रिफलां च कुबेराक्षीं दत्वा मूलेनुसेचयेत्। सबिडंगेंगुदीक्षौद्रलेपस्तस्य हितस्तरोः।।29।।

वैकंकतस्य(?) पत्रान् मूले चूर्णप्रदानतः। मध्वाज्यधूपात्सेकाच्च मुच्यतेजीर्णतस्तरुः।।30।।

शाखाग्रशोषणं तस्य त्व-(गभ्रं?)शोपि प्रजायते। वृक्षस्य पल्लवग्लानिर्बाढमौषधतो यतः।।31।।

कर्कंधुचारबीजैश्च सुरभीदुग्धभावितैः। औषधोत्थाव(म?)विकृतिं लेपात्संशामयेत्तरोः।।32।।

उध्दृत्य मूलाच्च मृदं सुसिक्तां संपूरयेदन्यमृदालवालम्। मध्वाज्यदुग्धैश्च विलिप्य गाढं संसेचये(त्)क्षीरजलैस्तरुं तम्।।33।।

सिताज्यगुग्गुलकृताद्धूपाच्छाम्यंति वै रुजः। चारुपल्लवत्वक्शोभा जायते तस्य शाखिनः।।34।।

अथ कृमिदोषलक्षणम्।

दोषैर्विना यस्य तरोःप्रवालहानिश्च शाखाग्रविशोषणं स्यात्। त्वग्भ्रंशनं पत्रविवर्णता च ग्लानिर्भृशं तत्र कृमींश्च विंद्यात्।।35।।

कृमयो द्विविधाः प्रोक्ता बाह्या अभ्यंतरा अपि। बाह्यास्त्वगाश्रयाः कश्चित्(केचित्?) पत्रपुष्पफलाश्रयाः।।36।।

कांडारको नाम कृमिर्मूलशाखान्तराश्रयः। तद्दोषतो तरुर्याति नाशं तत्तानुपाचरेत्।।37।।

कृमयो द्रुषु भूदोषाज्जलदोषाच्च दोहदात्। भवत्यत्र प्रतीकारं वक्ष्ये शास्त्रानुसारतः।।38।।

आरग्वधारिष्टकरंजसप्तपर्णत्वचां जंतुरिपोश्च चूर्णैः। मूत्रैर्गवां पर्य्युषितैः प्रलेपात्कृमीन्जयेत् बाह्यगतान्स्तरूणाम्।।।39।।

विडंगसिध्दार्थकटुत्रयेण गोमूत्रभल्लातवचायुतेन। लेपेन शाखांतरगान्कृमीन्वै हरेत्सवर्णान्कुरुते त्वचः द्रोः।।40।।

गोश्रृंगभल्लातकनिंबुमुस्तावचाविडंगातिविषाकरंजैः। ससर्जसिध्दार्थकसिंदुवारैर्धूपःकृमीनुध्दरति द्रुमाणाम्।।41।।

बिडालगोमायुवराहविड्भिः सिध्दार्थगोमूत्रयुतःप्रलेपः। कृमीन्द्रुमाणां हरतेंतरस्थान् बाह्यानमीषां सघृतोपि धूपः।।42।।

धूपायितः क्षीरजलैश्च सिक्तः प्रवालशाखाहरितो कृमिर्द्रुः(?)। स्यान्निंबसिध्दार्थवचाविडंगहि(हिं?)ग्वर्जुनत्वक्तिलदुग्धतोयैः।।43।।

जयेत्कृमीनिंगुदिकाफलत्वक्गुडांबुसेकात्सकलद्रुमाणाम्। लेपाच्च दुग्धाज्यगुडेंगुदीनां धूपादपि श्वास्थिनिबंधनाच्च।।44।।

मध्ये द्रुमाणां परिरोपितो वै पलाशशाखा(खी?)फलितो यदा स्यात्। जलोत्थरोगं जलजान्श्च कीटान्निवारयत्येष यथा ह्यशोकः।।45।।

अथ छिन्नतरुचिकित्सा।

सेको जलैर्मूध्नि च गोमयंस्याद्(?) गोविण्मृदः पूरणमालवाले। बिडंगमध्वाज्यगुडैःसदुग्धैः प्ररोहकृच्छिन्नतरोः प्रलेपः।।46।।

अंकोलतैलेन विलिप्य पूर्वं पश्चाद्विलिप्तः खलु कूपपंकैः। छिन्नांघ्रिपो दुग्धजलेन सिक्तः प्ररोहमायात्यचिरेण सश्वत्।।47।।

अथ शीतदग्धचिकित्सा।

अंकोलदुग्धाज्यमधुप्रलेपान्मूले च मृद्गोमयतैलदानात्। शाखा(खी?) तिलक्षीरनिषेकलेपात्सिक्तोंऽबुभिः शीतहतः प्ररोहति।।48।।

विडंगकुल्माषमयोविमिश्रं चूर्णं तिलानां निहितं च मूले। शीताहतद्रोर्जनयेच्च शाखा अंकोलतैलान्वितसाध्र्द(न्द्र?) लेपः।।49।।

मूले तरोर्गोमयभस्मदानं निर्गुंडिकाशोफकषायसेकः। शाखाप्ररोहं जनयत्युदीर्णं वसावराहस्य च लेपसेकात्।।50।।

अथाग्निदग्धचिकित्सा।

क्षीरांबुसिक्तो मधुनावलिप्तः कंदेन पद्मस्य पयोन्वितेन। मृदालवाले परिपूरितो द्रुर्बिभर्ति पत्राण्यनलेन दग्धः।।51।।

कर्कंधुमज्जामधुनावलिप्तः पंकेन लिप्तःकुणपांबुसिक्तः।प्ररोहमायात्यनलेन दग्ध. क्षीरातसीलिप्ततनुश्च शाखी।।52।।

अथ विद्युध्दतचिकित्सा।

मधूकमुद्गातिलमाषचूर्णैः सश(स?)त्कुदुग्धैर्विनिषिक्तमूलः।प्ररोहयत्येव तरुश्च विद्युन्निपातदग्धोत्यचिरेण सश्वत्।।53।।

उशीरमुस्तामधुदुग्धलिप्तः सिक्तोंघ्रिपो वज्रहतः प्ररोहेत्। सिताविदारीतिलनागजिह्वा कु-(मु?)द्वतीसूनपयोंबुसिक्तः।।54।।

शीतोपचारैर्जलजातकंदशैवालपंकैर्बहुशो विलिप्तः।दग्धप्ररोहं कुरुतेथ शाखी सिंचेद्यथाशुष्यति नैव लेपः।।55।।

अथ वातभग्नचिकित्सा।

स्तंभैरुत्तंभ्य पूर्वं तमथ रसनयावध्य वातादिभग्नं प्लक्षाम्लोदुंबरत्वक्समधुघृतसितादुग्धलिप्तं च पश्चात्।

मूले सप्लक्षमृत्स्नासुकरिषभरिते सेचयेत् क्षीरतोयैस्तस्मात्स्वस्थः पलाशी घनपि(वि?)टपदला(लः?)पुष्पितः स्यात्फलाढ्यः।।56।।

अथान्यतरुपीडितचिकित्सा।

मूले खनित्वा परिपूर्य मृद्भिः क्षीरांबुसिक्तो जरठः फलाढ्यः।स्यात्पादपो मर्दनपीडितोपि सहावदानात्(?) प्रकृतिस्थितश्च।।57।।

अथ स्थानांतरनीततरुचिकित्सा।

विडंगदुग्धांबुनिषेक इष्टो मधूकचूर्णं सतिलं च मूले।स्थानांतरस्थस्य च पादपस्य मृद्गोमयाभ्यामपि पूरणं च।।58।।

अथ गदादिजादि(ति?)निवासदुष्टतरुचिकित्सा।

करीषमास्तीर्य तरोरधस्तात्प्रज्वाल्य हस्त्यादिनिवासितस्य।कृत्वालवालं परिपूर्य मृद्भिर्मध्वाज्यलेपोंबुपयोनिषेकः।।59।।

अथ संसर्गदुष्टचिकित्सा।

मध्यस्थितो द्रुश्च निकृंतनीयः संसर्गदुष्टःसुखमाशु धत्ते।उध्दृत्य मृत्स्नां सुमृदानुपूर्य द्रुर्भूमिदुष्टोंबुनिषेकतोपि।।60।।

स्थानांतरेल्पःपरिरोपणीयोऽथवा समुध्दृत्य विधा-(विधाय?) गर्ते ।प्रज्वाल्य मृद्भिः परिपूर्य तोयैः संरोप्य भूदुष्टतरुं च सिंचेत्।।61।।

अथ------(?)

ऋतुधर्मविपर्यासे तरौ तं समुपाचरेत्। दुग्धांबुकुणपैःसेको दोहदादप्रतिक्रियाम्।।?।।

अभिज्ञैर्यत्र मंत्रादौ कार्या रक्षा तरोर्भृशम्। मंत्रयंत्रांतरैस्तंत्रैर्देवताराधनेन वा।।62।।

वपेत्तिलान् क्ष्मामभिकृष्य पार्श्वे मृदालवालं परिपूर्य तेषाम्। क्षीराज्यदुग्धैश्च विलेपनं स्यात् दुग्धार्जुनत्वक्कृमिनुत्पयोभिः।

सेको द्रुमाणांफलपुष्पवृध्द्यै।।64।।?

अथोपचारदुष्टतरुचिकित्सा।

दुग्धांबुसेकोप्युपचारदुष्टे तरौ भवेत्पुष्पफलाभिवृध्द्यै। लेपस्तिलक्षीरघृतैश्च सेको गुडान्वितैरौषधदूषितेपि।।65।।

यदौषधादिसंसर्ग मृदाद्यपनयेच्च तत्। आलवालं च संपूर्य मृदा भूयो विचक्षणः।।66।।

म्लानपांडुपतत्पत्रफलोल्पकुसुमोंघ्रिपः। कुंचत्प्रवालोऽसेकात्स्याच्छाखावृध्दिविवर्जितः।।67।।

मध्वाज्यधूपितक्षीरयवचूर्णांबुसिंचितः। हरित्पत्रस्थिरफलो द्रुमःस्यात्कुणपादपि।।68।।

यद्यस्य वृध्द्यै पूर्वोक्तं तत्कार्यं हितमिच्छता। तिलतैलादिकं शीतकाले दद्याद्विचक्षणः।।69।।

शर्करातिलगोक्षीरलेपात्सेकाच्च सांबुनः। अंघ्रिपानां समस्तानां शोष(षः?)शाम्यति सर्वथा।।70।।

कृतोपचारो न यदा वृध्दिमायाति पादपः। दोषात्स्थानांतरे सोपि रोप्यो सावल्पपादपः।।71।।

कट्वंगभिल्लोटवचाविडंगसिध्दार्थकृ-(ष्णा?)रजनीद्वयेन। संसाधितं क्षीरयुतं घृतं यत्तस्योपलेपात्सुखिनोंघ्रिपाः स्युः।।72।।

अथ स्रावचिकित्सा।

धववेतसतर्करीप्रियंग्वर्जुनवल्कलैः। पयःसिध्दैवि(र्वि?)लिप्तानां श्रा(स्रा?)वः शाम्यति शाखिनाम्।।72 ?।।

तिलयवशतपुष्यामत्स्यधर्तूरपत्रक्वथितजलनिषेकात्म्रावशांतिस्तरूणाम्।

गुडसलिलपयोभिःसेचितानां निकामं भवति सुखमथैषां पुष्पपत्राभिवृध्दिः।।73।।

सुरभितृणविदारीपद्मकोशीरपथ्यातगररजनिकुष्टश्रीद्रुजंतुघ्नरोध्रैः।सुरतरुजलदुग्धैःप्रस्थमात्रं विपाच्यं भवति च तिलतैलै रोगनुत्पादपानाम्।।74।।

बिडंगरोध्रसंमिश्रसितादुग्धांबुसेवनम्।शीतकाले हितं सश्वत् लताविटपिनां सदा।।75।।

आलवाले च मृद्दानं तिलदुग्धांबुसेचनम्।शीतकाले लतानां वै विटपानां विशेषतः।।76।।

जलसेकःसदा श्रेष्ठो लताविटपिनां भवेत्।क्रिया यथोचिताः कार्यास्तत्रसर्वत्र शाखिनाम्।।77।।

शास्त्रेषु योगा बहवो निरुक्ता इहानुभूता लिखिताः कियंतः।चिकित्सितं तत्कुशलैर्विधेयं विचार्य बुध्द्या विहितं द्रुमेषु।।78।।

ग्रंथेस्मिन् चक्रपाणेश्च पूर्णतामष्टमो गमत्।चिकित्सिते द्रुमाणां तदुल्लासो विश्ववल्लभे।।79।।

इति मिश्रचक्रपाणिविरचिते विश्ववल्लभे अष्टम उल्लासः समाप्तः।

नवम उल्लासः।

कुमुदफलविपक्वं बीजमादाय शुष्कं मृदितमथ करीषे माहिषस्यापि मूत्रे।

दिनमति-(?)यावच्छुध्दभूमौ तदुप्तं जनयति करवीरं कौतुकं स्याच्च लोके।।1।।

पक्वे मीनपलांबुनीह निहितं बीजं मधूकाम्रजं यावत्सप्तदिनं ततो रविकरैरुध्दृत्य संशोषयेत्।

दुग्धाज्ये थ पुनर्निधाय विधिवच्चांकोलतैलान्वितेऽप्युप्तं तद् बृहतीं तनोति जनताचित्रंकरं स्यादिह।।2।।

एरंडबीजं च वराहरक्तवसाभिषिक्तं परिभावितं सत्।अंकोलतैलेन दिनं तदुप्तं सूतेथ कारल्ल-(ल?)तां विचित्रम्।।3।।

कोलमीनवसामांसवनकक्षारभावितम्।बीजमा-(त्रं?)क्ष(क्षि?)तावुप्तमारोहति फलत्यपि।।4।।

दालांघ्रिपेयो सुखिरं विधाय यस्यैव बीजैः परिपूरितं तत्। संलेपितं वत्सविसा(षा?) प्रवृध्देत्तस्मिंस्तदाकारफलं भवेद् वै। ।5। ।
कूष्मांडवार्ताकपटोलकादि बीजं वराहस्य वसा विभाव्य। उप्तं सुसिक्तं च फलानि भूरि बृहंत्यनस्थीनि दधाति चित्रम्। ।6। ।
मध्वाज्यालुलितं विशोष्य किरणैः सूय(र्य?)स्य वार्त्ताकजं बीजं वल्लियुते विधाय सुखिरं कूष्मांडके कोमले।
क्षिप्त्वा गो--(?)विलिप्य सहू(ह?)सा पक्वे समुध्दृत्य तच्चोप्तं स्वे समये फलं वितनुते कूष्मांडतुल्यं महत्। ।7। ।
अंकोलतैलेन वराहनक्रवसानुलिप्तं खलु बीजमात्रं। उप्त्वा च भूमौ करकांबुसिक्तं सद्यःप्ररोहं कुरुते (अ)तिचित्रम्। ।8। ।
आम्रस्य बीजं शशकूर्मरक्ते त्रिसप्तवारं परिभावितं यद्। दुग्धांबुसिक्तं तरुतां प्रपन्नं फलं विधत्ते खलु सर्वकाले। ।9। ।
अंकोलतैलेन नृरक्तभिन्नं बीजं करे रोहति मृत्सुपूर्णे। सिक्तांबुना रोहति तत् क्षणेन चित्रं हि लोके वितनोति भूरि। ।10। ।
अंकोलतैले परिभाव्य कंदं तं कौमुदं गोमयभावितं च। स्थितं घटे वै करकांबुपंकतोयैः सुपूर्णे कुसुमं प्रसूते। ।11। ।
करीषकोलास्थिविदग्धगर्ते पूर्णे भृशं वालुकया नु तत्र। उप्तं सुसिक्तं खलु मूलकं स्यात्स्थूणासमं चित्रकरं च लोके। ।12। ।
अथ वृक्षचित्रीकरणम्।
शकृद्विडंगेक्षुरसेन सिक्तो य आलवाले खलिमिश्रितेन। द्रुमः सदा पुष्पफलानि धत्ते मनोहरं लोकविलोचनस्य। ।13। ।
इहेष्टिकाभिः पुरुषप्रमाणे चितेऽवटौ यो विटपश्च जातः। स वामनः पुष्पफलो(ले?)विधत्ते सदैव लोके वितनोति चित्रम्। ।14। ।
मूले सदांकोलवराहरक्तमेदोवसासंक्वथितेन सिक्ता। मिष्टान्ययाम्रस्य फलैः समानि फलानि सूते कदलीति चित्रम्। ।15। ।
विडंगयष्टीमधुकोशमदुग्धैर्यवस्य चूर्णेन गुडेन युक्तैः। लिप्तो विलिख्यांबुपयोनिषिक्तस्त्य(स्ति?)क्तोंघ्रिपः(?) स्यान्मधुरःस्वभावात्। ।16। ।
विडंगयष्टीमधुशर्करांबुक्षीरैर्निषिक्तोऽम्लफलः स्वभावात्। धत्ते स्वकंदे विटपोपि सश्वत्स्थूलानि मिष्टानि फलानि चित्रम्। ।17। ।
वराकाही(वाराही?)घृतकुंचिकाकृमिहराराजीघृतामत्रके संस्थाप्येक्षुरसैदिनतिथिमितौ तेन द्रुमूलं ततः।
आलिप्याथ मृदा सुपूर्य बहुशः संधूपितःसेचितश्चेक्षूणां च रसैरकालकुसुमं धत्ते फलान्यंघ्रिपः। ।18। ।

बालांघ्रिपं यानि विदार्य तत्र क्षिपेच्च बीजानि विलेपयेत्तम्। गोवत्सविड्भिस्तरुणःस धत्ते ताद्दृक् फलानीह विचित्रमेतत्।।19।।

छिन्नस्कंधोप्यतरुणतरुर्वह्निना मंददग्धो लिप्तो भूयः कुणपलवणक्षौद्रसर्प्पिःपयोभिः।

दुग्धांभोभिःसुपरिषिचितो लोहविध्दा(ध्द?)श्च मूले धत्ते काले सुकुसुमफले वामनश्चित्रमेतत्।।20।।

विलिख्य मध्वाज्यविडंगदुग्धैर्लिप्तानुगाढं त(तृ?)णचर्मबध्दा। दुग्धांबुसेकाद्विटपस्यं शाखा धत्ते चिरं पक्वफलं विचित्रम्।।21।।

द्रुमस्य फलिता शाखा विलेख्यार्द्रेण चर्मणा। बध्दा पक्वफलं धत्ते चिरं चतुरचित्रकृत्।।22।।

न सेचनीया विटपाः कुलत्थक्वाथांबुना तत्फलपुष्पनाशम्। करोति तद्वल्लवणार्जुनत्वक्कर्करिकाकिंशुकतोयसेकः।।23।।

चिंचिनीबदरपार्थफलानां क्वाथसेविततरुःफलपाकम्। निंबुकांबुघृतलिप्तफलो वै याति नैव चिरमत्र विचित्रम्।।24।।

कसार्षभी पार्थफलाल्पकोलतपोधनैरंडसिराम्लिकानाम्। कषायसेकात्सकलद्रुमाणां करोति सश्वत्फलपाकहानिम्।।25।।

सद्योहतस्य च्छागस्य द्रुमस्कंधं च(धस्य?)चर्मणा। सुबध्दायां च शाखायां फलपाको न जायते।।26।।

अथ पुष्पचित्रम्।

उप्तं समुत्पाद्य हयारिकांडवारत्रयं मृद्युतमालवाले। सिक्तं घनोशीरजलांबुभिस्तत्सुगंधिचित्रं सुमनः प्रसूते।।27।।

विदारिकंदेक्षुरसेन लिप्तो मूले द्रुमश्चेक्षुरसेन सिक्तः। कृतालवालःकुसुमानि भूरि सदा विधत्ते कुतुकं च लोके।।28।।

समस्तुवषो(र्षो?)पलतोसिक्तः(?) सुधूपितः कुंदरुधूपकेन। पीतानि तुल्यानि च चंपकस्य शप्तः पलाशः कुसुमानि धत्ते।।29।।

निशाकिंशुककर्प्पासीरोध्रतोयैः सुसिंचितः। विधत्ते कनकत्वक् द्रुः सुवर्णाभं कु(?)सुमं सितम्।।30।।

मंजिष्ठाहिंगुलुक्षीरकपोतासृक्विमर्दिता। सौराष्ट्रीमुत्सितं पुष्पं सुवर्णाभं करोति च।।31।।

धवखदिरकपालीकुष्टसौरभ्यवस्तुक्वथितजलनिषेकैर्लेपनैश्चापि शाखी।

कुसुमसुरभिमृत्स्ना मूलसंक्षेपणाद्वै विगतसुरभिपुष्पः स्यात्सुगं(धा)द्व्यपुष्पः।।32।।

एलानखत्वक्तगरांबुकुष्टमांसीघनोशीरकषायसिक्ताः। सुगंधपुष्पाश्च भवंति सर्वाः सयूथिकाःकंदजयादिकाश्च। ।33। ।

लताविटपयोर्मूले मृदु भस्म निधाय च। सिक्ते दुग्धांबुभिः पुष्पकध्दि(?)स्तत्र सदा भवेत्। ।34। ।

नखांबुतगरोशीरत्वक्पत्रजलसेचिताः। चित्रसौरभ्यपुष्पाः स्युर्जी(र्जा?)तीनेमालिमल्लिकाः। ।35। ।

एलाजटोशीरघनांबुकुष्टत्वक्पत्रिकाचक्रहनूजटीनाम्। चूर्णं च दत्वाय तदंबुसिक्ताः सुगंधपुष्पा विटपा लताः स्युः। ।36। ।

मंदाररंध्रेऽविनिर्गताया(?) कूष्मांडवल्ली खलु मूलभागे। संपूरिता गोमयमृत्तिकाभिः सिक्ता सदा स्थूलफलानि धत्ते। ।37। ।

निधाय मूले मृदुभश्म(स्म?) पूर्वं मृद्गोमयाभ्यां परिपूर्य पश्चात्। या(जा?)ती विधत्ते कुणपांबुसिक्ता वसंतकाले कुसुमान्यपीह। ।38। ।

चूर्णं यवानां तिलपिष्टमिश्रं क्षिप्त्वाय(मृ?)द्भि ---(?)तु भृतेपि मूले। उर्ध्वं प्रवृध्दा विटपैश्च तुल्या भवंति वल्यो जलदुग्धसिक्ताः। ।39। ।

अथ मतांतरे फलचित्रीकरणम्।

मधूकपुष्पैर्मधुयष्टिकुष्टसिताघृतक्षौद्रयुतैश्च पिष्टैः। आच्छाद्यते यद्विटपस्य मूलं फलं च तस्यास्थिविवर्जितं स्यात्। ।40। ।

गुंजामधूदुंबरशर्कराज्यमधूकपुष्पाणि विकीर्य कांडम्। अंतर्निधायोपरि वत्सविड्भिर्लिप्ते तरौ स्यात्फलमस्थिवर्ज्यम्। ।41। ।

जीवंतिकापत्रमनःशिलालं मंजिष्टिकादारुनिशायवैश्च। गोजाविदुग्धैःसतिलैर्विलिप्त्वा कार्पा(स?)कि स्याच्च खनीलतूला। ।42। ।

कार्पासिकायवनिशापलाशतिलपूरिता। मूले तदंबुसंसिक्ता रक्ततूलफला भवेत्। ।43। ।

त्रिफलाशाल्मलीत्वगृभिः सनिशाकुष्टसीधुभिः। लेपात्सेकाच्च कार्पासी हरित्तूलफला भवेत्। ।44। ।

कासीसनीलीतिलताम्रयष्टीवचानिशायुग्मसुचूर्णलेपात्। तदंबुसिक्ता खलु पीततूला कार्प्पासिकीस्यात्कुकचुलः(?)क। ।45। ।

चूर्णं यवानां परिलोडय चेक्षुरसेन सिक्ताज्यविडंगधूपैः। सुधूपिता सा परिपाककाले द्राक्षा भवेन्मिष्टफला हि सम्वत्। ।46। ।

पूर्वोक्तयोगव्दितयस्य नूनं स्वभावतोम्ला अपि सेकलेपात्। समस्तवल्लीविटपाश्च रम्यसुमिष्टमेदस्विफला भवंति। ।47। ।

कस्तूरिकागंधरजःसुगंधतोयेन संसिक्ततलः सुपक्वः। तत्तुल्यसौरभ्यरसस्तथेक्षुकांडो भवेन्मिष्टतरो हि नूनम्। ।48। ।

जलै लोशीर(?)मुस्तांबुसिक्तश्च दिनविंशकम्। तथा सौरभ्यसंवाही भवेदीक्षुरसो हि वै।।49।।

विचित्रकरणे योगाः कियंतो लिखितो(ता?)मया। इ(द्र?)ष्टव्याश्चतुरैरन्ये शास्त्रलोकानुसारतः।।51?।।

विदग्धहृदयाह्लादिग्रंथेस्मिन् विश्ववल्लभे। चित्रीकरणसुलोमुल्लासे(समुल्लासे?) उल्लासो(?) नवमोभ्यगात्।।52।।

इति श्रीमिश्रचक्रपाणिविरचिते चित्रीकरणनवमोध्यायः।

।।संवत् 1925 शाके 1790 फाल्गुनकृष्ण(?)नवम्यां लिखितं लक्ष्मीनारायणेन भक्तावरस्य पठनार्थम्।।श्रीरस्तु।।

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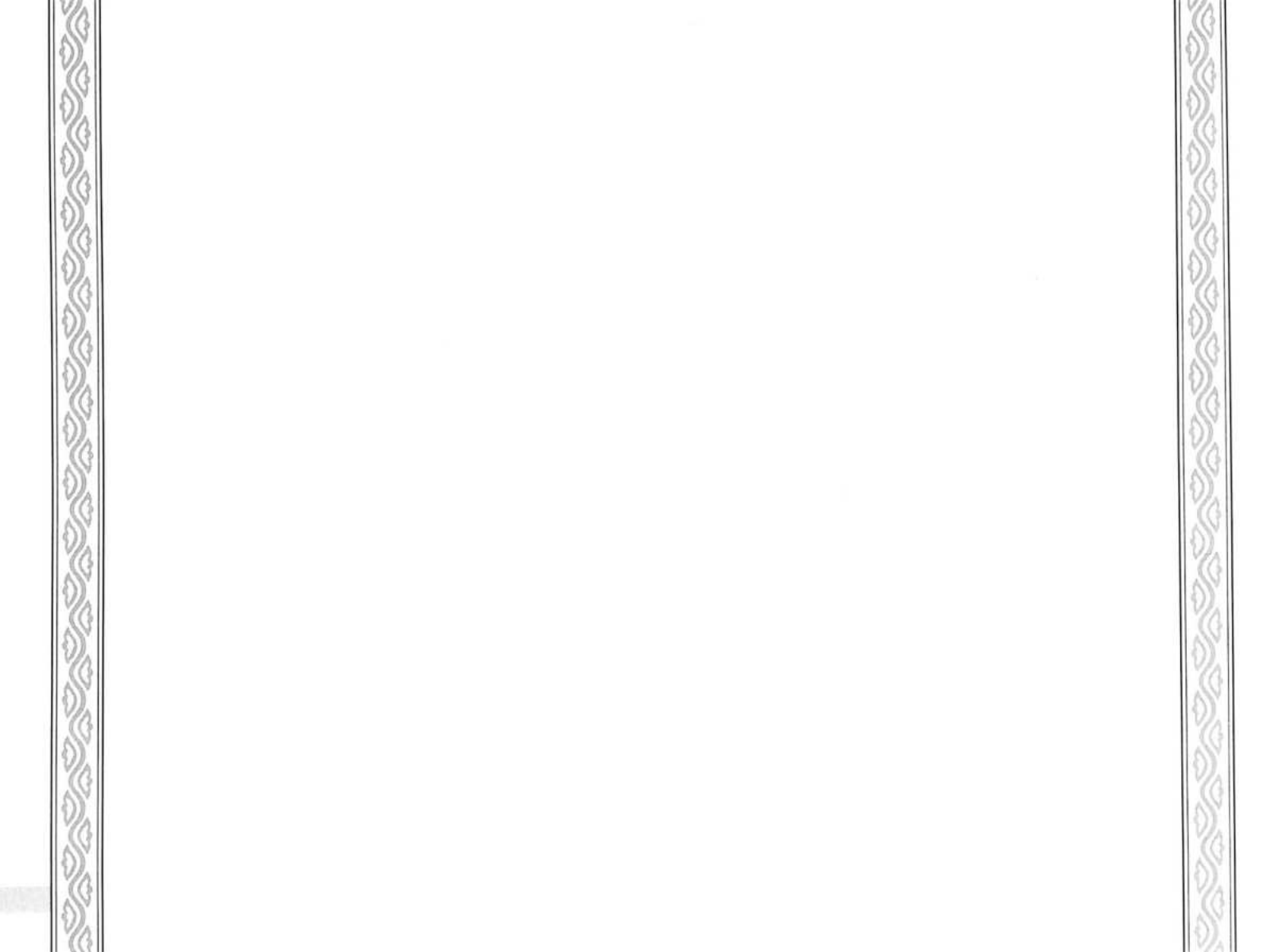
vishvavallabha

(Translation)

Table of Contents

Vishvavallabha

Chapter I : Groundwater

A. Groundwater

1. Having saluted the lotus like feet of Shri Raghavendra as also those of my preceptor, I shall expound the everlasting knowledge on water and also the technique of planting, etc., of trees, depending on it.

2. How much water is available underneath the ground? What are the indicative signs to find it and at what depth (literally, at how many hand-lengths*) is it available? In which direction do the currents flow? Is there an obstruction of a rock, etc.,? Is the water sweet or otherwise? Is there sand underneath? –This and all that which is conducive to the welfare of mankind, I shall now narrate after consulting the sciences, which impart everlasting knowledge.

[*A hand-length is considered equal to one and a half feet or 45cm approximately.]

3. A wise man should explain all this, after first ascertaining the type of land, which is ordinary, wet, dry, or mountainous, since indications depend on the type of land.

4. Although scholars of proven wisdom have affirmed that groundwater is available close to the surface in wetland, and that it is found at a considerable depth in the drylands, deserts, and mountainous regions full of gravel, I shall narrate (the availability of groundwater), with regard to the ordinary and mountainous regions, according to the technique as explained only in the ancient science, on account of the persistent requests made by the king.

[The text appears to be corrupt at some places.]

5. There are eight currents of water under the earth running towards the (four) main and (four) intermediary directions and there is the ninth forceful current (at the center) proceeding upward. These are the main water currents and are stated to be fruitful for acquiring (a constant flow of) water.

6. Sometimes a stream proceeds from a mountain or from the root of a tree downwards to a brook while sometimes all the streams are seen readily visible in the valley.

7. If the earth is too hard to dig, almost like a rock, and if the axe hits on a *parpata* stone*, there is plenty of water underneath.

[**Parpata* is a name of several plants according to Bhavaprakasha. But that meaning does not suit the context. One of the varieties of *parpata* tree, *Glossocardia*

bosvellea (L.f.) DC., grows on rock. It is possible to translate the word *parpatashma* as 'a rock on which *parpata* grows'. *Parpata* also means food preparation called '*papad*' in Hindi and many other Indian vernaculars. It is a thin *roti,* prepared mainly from blackgram flour, and is dried and stored. When fried or roasted, it is eaten with rice as a thin, crispy snack. Perhaps the stone is so called because it is also made of thin flakes (?). While describing the same indications of groundwater, Varahamihira (54-6) mentions *putabhedaka pashana* in place of *parpatashma,* which means 'rock, cleft asunder'. The meaning, a flake stone or a cleft rock, which suits the context better, depends on the type of stone that is likely to be an indication of water current underneath.]

The lucky combinations in a dry region

8. When a *cane* cluster is noticed growing on the surface in the absence of any water body (in the vicinity), a current runs underneath at a distance of three hands (cubits) to its west. After digging the ground for seven hands, at a distance of two and a half hands a gold-colored stone, followed by a *parpata* rock, and then the water are found.

9. Where (on dryland) there is a tree of dark *udumbarika* (without any source of water in the vicinity) a current of water runs underneath, at a distance of three hands to its west at the depth of two and half man-heights. At the depth of a man-height there is white sand. To the east (of the tree) too, a current runs at the depth of two man-heights. The earth there, is of the color of iron or is white. Further at the depth of (?)* man-height a frog is sighted.

[* A word is incompletely scribed here. A man-height is stated to be the measure of a man of normal height (6 ft) standing with his hands raised upward.]

There are two sets of combinations here:

10. If to the north of an *arjuna* tree an anthill is spotted at a distance of three hands to the west of that tree, there certainly exists a source of limited water at the depth of three and a half man-heights. If at the depth of half a man-height an alligator of whitish dusty color is sighted and close to the water there is white sand first and then yellow sand, the water there is very sweet (tasty).

11. To the south of the anthill near a *jambu* tree there is a possible source of sweet water at the depth of two and a half man-heights, where the rock is of the color of a pigeon. If there is a *badari* tree to the west of the anthill, source of water at the depth of three man-heights to the west of the anthill should be foretold and an alligator at a distance of two hands would be the indication.

Two sets of combination in this regard:

12. If there is a *sinduvara* tree near an anthill, water exists to its south at the depth of one and a half man-height. The earth is brown, sandy, and white sequentially. If there is a combination of a *kola* and a *palasha* tree, water exists at the depth of three and a half man-heights

under the ground at a distance of three hands to the west, and the sand there is whitish red.

Two combinations here:

13. If *bilva* and *udumbarika* are found in combination (near an anthill), water exists at the depth of three and a half man-heights to its south at a distance of three hands, and a frog is an indication. If, however, *kakodumbarika* is close to an anthill, water exists at the depth of three man-heights to its west and at the depth of half a man-height, the rock is white and so is the soil.

Two combinations here:

14. A feeble current of water is stated to exist underneath, to the east of a *kampilla** tree (spotted in a place without water source) at a distance of three hands. The earth is salty and of the color of iron. A similar (thin) current of water exists to the north of a *shona* tree. If there is an anthill to the south of *kali* tree, water would exist to its west at the depth of a man-height. If the tree is to its west, water currents could be traced at the depth of four and a half man-heights.

[*The corrupt script is deciphered with the help of the text of Brihat Samhita, 54.21.]

Three (two ?) combinations here:

15. If there is an anthill to the south of a *karanja* tree there would be two currents of water running underneath at the depth of three and a half man-heights in that (southern) direction at a distance of two hands. At the depth of half a man-height a tortoise is sighted before the currents. If that (anthill) were positioned to the north of a *madhuka* tree, water would be found to its north and west (at the same depth). At the depth of half a man-height a snake is sighted. The earth there is of a smoky color and rock is reddish.

Two combinations here:

16. If to the south of a *kapittha* tree, there is an anthill, and if a frog is sighted under the tree, water can be found at the depth of four man-heights at a distance of seven hands to the east or north. If at the depth of a man-height a spotted snake is sighted and below the spot there is black earth and a *putaka* rock, a pair of water-streams proceeding to the north would then be found.

17. If to the north of an anthill a *tilaka* tree is spotted with smooth *durva* and *kusha* grass growing around, a current leading to the east would be traced to its west at a distance of five hands. If there was a tree of *nalikera* or *tala* in association with an anthill there would be a current of very sweet water at the depth of four man-heights at a distance of six hands to the west.

Two combinations here:

18. If a *badari* tree or an anthill is found positioned to the left of *ashmantaka* tree, there is water to its east at a distance of six hands at the depth of three and a half man-heights if proper indications are seen. At the depth of a man-height a tortoise and a rock of a dusty color are the indications. The current of water running towards

the south is found first. Below that is another current proceeding to the north. The latter one is a perennial source of water.

19. If a *haridra* tree has to its left an abode of a serpent* (anthill), water would be found to its east at a distance of three hands at the depth of five man-heights. At the depth of a man-height, an extremely white serpent, yellow soil, and black soil are the sequential indications and beneath that (at the depth indicated) a current flows to the west which is found first. Another current flowing to the south is traced thereafter. Wherever herbs, water or trees, grass, and creepers are found, water current runs very close to the surface.

[*The Sanskrit word *phali* is corrected to *phani* on the authority of Brihat Samhita, 54-45.]

Two combinations here:

20. The region in which *bharngi, danti, rudanti, trivrit, asitadala* (having black leaves), *lakshmana, malika (nava)* grow, water exists to their south at the depth of three man-heights. The region where a single branch of a tree bends low and the leaves of other trees are glossy, water exists beneath that branch and quantity of water is proportionate to it. Water also exists where the trees are glossy, dwarfish or excessively broad (spread out) and where the branches are hanging low.

Two (three ?) combinations here:

21. If the ground makes deep rumbling sound when struck with feet, water exists underneath at the depth of three man-heights. If a *kharjuri* tree is bent at the top, water exists to its west at the depth of three man-heights. If a *palasha*, *karnikara*, or *kola* has white flowers, to its right at the distance of two hands there exists water underneath. (So good that it is rare to be found even in the Gods' abode but it would not last beyond three years).

Two combinations here:

22. If hot vapors or smoke rises from the ground at the depth of two man-heights, water exists under the surface. If crop (sown on a piece of land) turns white and perishes, water is traced under the ground at the depth of two man-heights.* Preceptors have stated several such combinations but I have explained only a few of them pertaining to dryland bereft of (surface) water, for fear of unnecessarily increasing the volume of the work.

[*The script being unintelligible this line is interpreted with the help of Brihat Samhita, 54.61 having a similar content.]

Thus ends the section on dryland.

B. Here commences the section on deserts

1. Hereunder surface indications for groundwater, whether sweet or containing safe proportion of salts on the land of Marwar (alternately any desert land) are being described as are in agreement with the great sages, so that the people of the region can experience lasting happiness. Generally in such a region, there would be

several currents of groundwater equal in thickness with an elephant's trunk.

2. When an anthill is found to the north of a *karira* tree, sweet water is indicated to the south (of the tree) at the depth of ten man-heights. A yellow frog at the depth of a man-height is a further indication. If an anthill is situated to the west of a *rohita* tree, salt water exists at the depth of twelve man-heights at a distance of three hands and there are many currents on the west.

Two combinations:

3. Close to a white anthill on the west, water current exists at the depth of five man-heights. An earthworm on the north, and yellow soil on digging up to a man height are further indications. An anthill to the east of a *pilu* tree indicates excessively salty water to the south at the depth of one to seven man-heights. On digging to the depth of a man-height, a black and white snake, one hand in length, is observed.

[Corrupt text is read with the help of Brihat Samhita (54-65, 66).]

Two combinations:

4. An anthill to the east of *indra* tree indicates water just at the distance of a hand to its west at the depth of twenty man-heights. At the depth of a man-height an alligator is sighted. A combination of *kantakari* plant with a tree without leaves, indicates water at a distance of three hands to the west at the depth of thirty-six man heights, if the current is strong, leading to the northeast.

Two combinations:

5. A combination of *rohita, badara,* and *pilu* trees indicates water at a distance of three hands at the depth of sixteen man-heights. A scorpion at the depth of half a man-height, white soil, are further indications.

[The verse is incomplete.]

6. A *karkandhu* tree combined with a *pilu* tree indicates existence of very salty water three hands to the east at the depth of twenty man-heights. A *bilva* or a *karira* tree in combination with a *kakubha* tree indicates very sweet water at a distance of two hands at the depth of twenty-five man-heights.

Two combinations:

7. Five anthills at one place with the middle one being white indicates a source of water at the depth of fifty five man-heights. An anthill with *kusha* or white *durva* growing on the top indicates water underneath at the depth of twenty-one man-heights.

Two combinations:

8. A *rohita* tree surrounded by other trees at the center of three anthills suggests existence of water at the depth of sixty man-heights. Yellow soil is a further indication. A *palasha* tree in combination with a *shami* tree indicates a source of water to the west underneath, at the depth of sixty man-heights. (Yellow soil mixed with sand at the depth of half a man-height is a further indication).

[The verse is incomplete and the text is corrupt. It is interpreted and completed with the help of Brihat Samhita, 54-83 having the same content].

Two combinations:

9. A *rohita* tree surrounded with anthills indicates a source of very clear and sweet water, seventy man-heights deep to the east. A *nimba* tree with glossy leaves exuding sap suggests existence of plenty of clean and fragrant water all around at the depth of forty man-heights.

Two combinations:

10. Ancient scholars have stated that a *shama* tree, full of knots growing to the south of an anthill indicates source of sweet water, fifty man-heights deep to the west. If it (*shama*) has white thorns, water source is indicated at eighty man-heights depth to the south. A snake at the depth of half a man-height is a further indication. If it is a combination of *neepa* tree and anthill, water is found at the depth of twenty-five man-heights.

Two combinations:

11. On excessively smooth land surface, water is indicated at the depth of twenty-five man-heights if the soil at the depth of three man-heights is black or pale white. To the left side of a *mahanimba* tree with thick growth of smooth leaves, water is available at the depth of seventy man-heights. Birds on the tree there sing sweetly.

12. Plants and herbs with dark green leaves or trees like *neepa* and *shimpa* are indicative of groundwater at the depth of fifteen man-heights. Existence of a cobra is a further indication.

Thus I have stated here a few indicative marks found on the land of Marwar (or desert). Sharp-witted men can always learn about additional indications from other people or from other treatises.

Thus ends the section on Marwar region (or any region destitute of water).

C. Surface indications of groundwater on wetland

1. The wetland is strewn with water-growing herbs, plants, and creepers all bearing green leaves and full of *virana* grass . . . * and beset with mosquitoes. It has plenty of sweet water lying at the depth of a man-height. If the land is at a low level, water is indicated at the depth of three hands.

[*Part of the text is corrupt.]

2. Water is indicated very close under the ground on which grow *danti, rudanti, trivrita, shiva, shyama, mashuparni, garuda, ashuvega, jyotishmati, vyaghrapadi*, and *varahi.*

3. Water is also close under the ground where *mashacchada, gundraka, kokilasya, lakshmana, alindala, edukivya* (?), *brahmi, pindaraka, sharivakha*, and *nala* grass grow.

4. Plenty of groundwater would also be available, just at the depth of four hands to the south of a piece of land where several glossy trees and creepers grow. Low-lying areas of valley covered with green grass, where the surface soil is sandy and the ground reverberates with the sound of stepping too, are rich water resources.

5. Wetlands always have a guaranteed source of sufficient water close to the surface. As a result there are several surface indications too. Only a few of them are described here, overlooking the others.

Thus ends the section on surface indications in wetlands.

D. Ordinary land/mountain land

1. Water is said to be available everywhere on ordinary land at the depth of less than ten hands. Depending on surface indications the quantity is excessive, plenty etc.

2. It is certain that all the three types of land (dry, wet and ordinary) exist in the mountain regions. An expert should explain the indications only after taking into account the type of land in a particular region.

E. Indications of groundwater in mountains

1. Several surface indications of groundwater have been clearly described in literature. I have thoughtfully chosen here some of them. I state here those combinations with regard to mountain regions, which are described by Varahamihira and others.

2. A combination of *bodhi, udumbarika, palasha,* and *nyagrodha,* on dryland indicates plenty of water underneath them at the depth of three man-heights.

3. Trees, bushes, and creepers with a milky sap and glossy leaves without holes, and whereon birds of different sounds nest, indicate existence of sweet water close to the surface.

4. Water is indicated at the depth of three man-heights where *kharjuri, jambu, shatapatri, neepa, sinduvara, vata, naktamala, audumbari, kakaudumbari* and *bibhitaka* grow.

5. Water is also indicated at a place where flower-bearing trees and creepers like *jati,* etc., or *kubjaka, champaka,* etc., grow and also at a place where *dadimi, nimbaka,* and *bijapura* bear fruits.

6. Water is also found in plenty where *tala, nalikera, kanchanara, vetasa* or any other tree with glossy leaves, grows on the top of a mountain.

7. A spring which has been referred to previously can also be found in a mountain region emerging either from a juncture of rocks or from the foot of a tree. It flows just by divine power and there is no measure for its quantity.

8. In the wetlands of mountain region, powerful water currents sometimes rising upward are traced under the

surface at holy places, in front of temples and other places.

Rocks as surface indications of groundwater

9. A rock facing eastward and having the color of *udumbara* or *anjana*, lustrous like lapis lazuli or white like a pearl, smoky like a straw or brown in color, indicates plenty of water nearby.

10. Rocks similar in color to a white silk cloth, clarified butter, pigeon, moon, or a high-rising rock indicates water, which can be reached in a moment.

Soil as surface indication

11. Sweet water is indicated under a piece of land which has sandy blue soil or sandy black soil or sandy soil in the color of wheat or of yellow color.

12. Small quantity of astringent water is indicated under the land having sandy soil of copper color. Water similar in taste to salt is indicated under land with pale white sand . . . *

[*Last line is missing.]

Vegetation as surface indication

13. Absence of groundwater is indicated where the trees, bushes, creepers growing on the surface are thin, rough and have leaves with small holes* and also where *shriparni, sarja, arjuna, shaka, bilva, shimshapa, partha,* and *dhava* exist.

[*The text is corrupt.]

14. Whatever measure of depth (as for example three or four man-heights, etc.,) regarding the availability of groundwater stated here, resulting from the combination of *durva, jambu, kusha, pichu, mahanimba, pilu, pavasa,* (*palasha*?), *kadamba, kutaja,* etc., in dryland (on plains), is reduced by a quarter in the drylands of mountain region, and by half in the wetland of mountain region. Sages have stated the same measure in hands, whether in wetlands or in plains.

[The text involves some difficulty in interpretation due to many factors like corruption, involved construction, ambiguity of expression, etc. Availability of groundwater in dryland on plains is taken here as the standard of comparison and water availability in other places is correlated to it, surface indications remaining the same. Thus for example, if combination of *jambu* and *durva* on dryland on plains indicates availability of groundwater, four man-heights below surface, the same combination on the dryland of mountain region would indicate water availability at the depth of three man-heights (one quarter less) and at the depth of two man-heights (reduced by half) on wetland of mountain region. The same combination in wetland on the plains would indicate availability of water at four hands (measure of man-height becoming measure of hands) below surface. See comparative chart below.]

Groundwater availability

Combination	Land on level surface	Depth of water	Land on mountain	Depth of water
Bilva and *udumbara*	Dry	3 man-heights	Dry	2+1/4 man-heights
	Wet	3 hands	Wet	1+1/2 man-heights

15. Wise men should first assess a region and group it (as per the availability of water) under one of the four categories, viz., meager, medium, plenty, and dry. Afterwards, measure of available water should be guessed accordingly (depth, etc.,). Indicative marks like *durva,* etc., as have been explained by ancient sages should be stated similarly on that category of land, only difference being in the measure (depth) of water available.

16. I have explained above the method of discerning groundwater from surface indications after the sage (Varahamihira). Having described the same, this chapter ends here.

Here ends the first *Ullasa* of Vishvavallabha dealing with groundwater, composed by Shri Mishra Chakrapani.

Chapter II : Water reservoirs

Construction of water reservoirs

1. After finding out the groundwater source, reservoirs should be constructed there in the villages. They are of various shapes and sizes. It will be in place therefore, to describe now their right location, measurements and so on.

2. Great sages have stated that pools, ponds, wells, and potholes when naturally formed do not have any fixed proportion. Periodical springs, canals, and water basins, etc., can be of any shape and size as desired.

3. Lakes are constructed in six* different shapes, viz., circular, quadrangular, triangular, multi-angular, long like a staff, or semicircular resembling the shape of half moon. One must know the measure of their depth.

[*Literally refers to 'number of tastes', which are sweet, sour, saline, bitter, pungent, and astringent.]

4. Some people give them names like large, circular, semicircular, auspicious, quadrangular, and immensely auspicious. But these people have obviously not comprehended the import of the treatise.

5. Three of these differ mutually due to the shape; one differs on account of its measure (depth) and the remaining two are distinguished on account of the difference in their method of construction. And the possibility of one

stemming from the other cannot be denied. Like water pots they possess mixed characteristics.

6. A lake is stated to be superior when measuring a thousand *dandas* (1.8 km) (1 *danda* = 4 *hastas*, 1 *hasta* = one forearm = approx.18in or 45cm) in length. It is mediocre when the length is half of that and inferior when the length is half of that of the mediocre one. Depending on the room available, they are indeed big or small.

7. If a dam is constructed between two hillocks or if an extensive land lies in front of a mound, a huge lake, a tank or reservoir always having plenty of water can be constructed in the basin at a low cost. (?)

8. When the land ahead is broad and rises gradually on all sides to a higher level, the input of water is ample. The land where water is let out can have a huge lake even with a small quantity of water if a dam is constructed. (?)

9. An expert should construct steps from the ground reaching up to the surface of the dam. To strengthen the dam, it should be secured with deep reaching layers of plaster of mortar.

10. When a low-lying piece of land is surrounded by watery land, a lake is automatically formed. There is no standard measurement for it. Even small lakes like . . . (?)* etc., are without any fixed measurements.

[*The text is corrupt and unintelligible.]

11. Pleasure resorts of kings are often built in the midst of a lake or on its bank. A boat should be kept ready there for facilitating water sports. A way to approach the resorts or bridges must be provided.

12. There are four types of ponds. *Nanda* has three projections and one entrance, *Bhadra* has six projections and two entrances, *Jaya* has three openings and eleven prominences, while *Vijaya* with twelve prominences is stated to be equipped with four openings. (?)

13. From a point equidistant from its two extremes and measuring twice or alternately half the length between them with a projection at the middle, a canal equipped with a spacious stairway, should be drawn. It should be equipped with an arched doorway and a banner. (?)

14. Wells are of seven types: *Vijaya* with two openings, *Dundubhi*, which is striking in appearance, *Chudamani*, *Bhadra*, *Jaya*, *Nanda,* and *Shankar*.

15. The diameter of the first (*Vijaya*) is four *karas* (approximately 10ft) (where *kara* is a measure equal to the breadth of twenty-four thumbs) and that of each succeeding one increases with one (*kara*). Holes, small wells, rivulets, and basins do not have any standard measurements.

16. If a well has sand at the bottom, it should be covered with a good quality timber or . . . * in such a manner as the flow of water current underneath is not obstructed.

[*Text is unintelligible.]

17. If in a village, a well is the main source of water . . . * and if it is situated in an inauspicious direction, it becomes a cause of fire and eventually causes death of frightened children and ladies.

[*The text is defective.]

18. A village where water current underneath does not exist even within the limit of thousand *dandas* (where a *danda* is a measure of length equal to four *hastas*) in directions stated to be auspicious for constructing wells, a well situated in an inauspicious quarter too, does not lead to misfortune. It may be used for watering trees, etc., without any harm.

19. *Bhadra, Subhadra, Parigha,* and *Nanda* are the four types of potholes (hollows receiving water from spring). The first one is quadrangular . . . *

[*The text is defective and not intelligible.]

20. Those that are minimum four *karas* and maximum hundred *hastas* in measures, have access on four sides and can be situated in all the four quarters. They should be planned in the center of the open quadrangles of mansions and should be equipped with small windows at the corner.

21. They are naturally formed and have unfathomable depth. The same when dug with human effort can have various shapes. In whichever form they exist, they should be strengthened with stones and mortar.

22. While digging ponds, etc., if one runs into a rock, it is necessary to find out whether it is hard or soft. Sages have stated certain colors to ascertain this. I shall now explicate the same.

23. A rock with copper content resembles the color of copper. There are variegated rocks, spotted rocks, and rocks of pearl and gold color. Some resemble the color of deer and others the color of camel's nails. Some are bright like moonlight and others resemble fire. Still others appear like the sun.

24. They are of the color of ashes and collyrium or as bright as crystal too. Some are lustrous blue and others whitish. Some have unusual yellowish green color of the *haritalas* (yellow orpiment or arsenic trisulfide). A rock facing south cannot be cracked easily.

25. And I shall now explain in detail, several techniques, most wonderful in nature for cutting rocks and also the medicines to be used in water for the purpose, so that the implement neither bends nor becomes blunt in the process.

26. The rock must be heated first by burning firewood and then should be sprinkled with water mixed with (leaves of ?) *palasha, jambu, dhava, sadara, shirisha, vanjulaka, tinduki, bhallata, chincha, khadira,* and the like.

27. *Badara*, buttermilk, and *kulattha* must be soaked for a period of seven nights so as to procure a sour gruel. When this is sprinkled over the boulder preheated with fire it can be easily smashed.

28. When water mixed with chalk is sprinkled over the preheated boulder and if it is reheated and besprinkled again; similarly, if the boulder is sprinkled with acrid water mixed with the *shara* grass, it breaks into pieces without fail.

29. A tough boulder when sprinkled with heated raw sugar and natron (impure alkali or sodium carbonate), water mixed with turmeric (*nisha*), *kana,* and oil of mustard, along with sour gruels, breaks without much effort.

30-31. A boulder can be smashed by sprinkling with ashes of *apamarga* mixed with the bark and leaves of *nimba*; with *guduchi* mixed with ashes of sesame and *nala* as also of *tinduka*; with cow's urine; with water mixed with oil and buttermilk; and also by applying a mixture of raw sugar and *siddhartha* to it.

32. . . . * and when daubed with droppings of pigeons, etc., and also when dipped in oil and buttermilk, the tip of the hatchet does not bend when struck on the stone.

[*The first line of the verse is defective and unintelligible.]

33. The tip of the hatchet becomes tough when it is treated with buttermilk and oil after heating. It may also be kept in oil or in a mixture of raw sugar and oil after treating with the sap of *bhringaraka*.

34. If a preheated iron weapon or hatchet is shaken in the alkali (ashes ?) of *kadali* . . . (the word used here in the text appears to refer to the duration of time), it neither breaks while splitting iron nor blunts on a boulder.

35. If the tool is kept in liquor, *yavakshara* (an alkali prepared from the ashes of burned green barley corns) or milky sap of *arka* and then in a mixture of *sankola* oil and water, it does not blunt while splitting a boulder or iron, nor does its tip bend.

36. If water of a well is saline, *khadira* used with *churna* (chalk powder), turns it into a desirable taste. If it is turbid, it can be purified with *palashabhasma*.

37. By putting the powder of *kakubha, musta, ushira*, fruits of *dhatri, kataka, loha*, and *rajadana* in wells or other water reservoirs, turbid, bitter, and foul smelling water can be turned into tasty, clean, and sweet smelling water.

38. When water has foul smell . . . and becomes turbid, fine powder of *kanakaphala* should be thrown into it. Similarly, *khadira* and *sara* (alternately, the essence of *khadira*) along with coconut (*sriphala*) thrown into a well turns its saline water into sweet tasting water.

39. The second chapter of Vishvavallabha dealing with water reservoirs as per the science of *vastu* is completed here.

Thus ends the second *Ullasa* of Vishvavallabha dealing with water reservoirs, by Mishra Chakrapani.

Chapter III : Examination and suitability of ground

Soil and propagation

1. Earth by nature is of three types: arid, wet, and ordinary. It is further distinguished on the basis of six types of taste and taste is determined by the color of the soil.

2-3. Soil is of six colors viz., dark gray, pallid, black, white, red, and yellow. Sweet, sour, saline, bitter, pungent, and astringent are the corresponding tastes. But this is an old theory. It is my considered opinion that the savor can be determined only by tasting the soil.

4. A piece of land that is infested with anthills, stones, and holes, that which is impregnated with salt, that which is inauspicious, that which is distantly located from water-source, and that which is sandy is poisonous for planting trees.

5. One must not plan a garden in a place in which trees and creepers are burned with frost and which is infested with *bimba* and *kanta*.

6. Land where the soil is soft and water is available nearby is good for plantation. Gardens should be planned on such sites in the interest of both the worlds. (Such gardens ensure happiness in life here and hereafter.)

7. Whether rock-strewn or soft, if the land has the color of heated gold, plants, flowers, *punnaga, rajadana, champaka* and such other trees grow there without much effort.

8. *Muchakunda* and trees belonging to its class, *shrikhandika, ketaki, ketaka, ambu* (a kind of *Andropogon?*), *rambha, ashvamara, lakucha, jambu, madhu* and such other trees, creepers and plants grow well in wet lands.

9. *Champaka, patala, amra, bakula, ashoka, kola, udumbara, nimba, pippala, vata,* as also other cultivated varieties like *chincha* and *ashana*, trees like *aksha, akshota, madhuka, shigruka, mahanimba, arjuna*, fruit-trees like *dadimi* and others and flower-creepers should be grown on ordinary (neither arid nor wet) land.

10. Arid lands are recommended for planting *dhava, khadira, palasha, vamsha, dhatri, ingudika, shivani, karabha, shaka*, (teak?) *shallaki, saptaparna, surataru, rajanika*, and trees belonging to the class of *tinduka* etc.

11. I have listed here some trees. The wise should guess others from them. They should think of such fruit-yielding and flower-yielding trees that can grow quickly on account of the natural characteristics of the land.

12. Due to divine power and due to extraordinary effort on the part of the rich and the rulers, trees and creepers grow even in unfavorable regions yielding fruits and flowers.

13. Bushes, creepers, and trees are propagated from seeds, stalks, and bulbs. Some are stated to grow both from seeds and stalks. I shall now distinguish them accordingly.

14. *Chincha, amra, champaka, madhuka, kapittha, jambu, punnaga, bilva, bakula, ashana, kanchanara*, as also *kshiri, kamu, panasa, akshaka, nalikeri, tala* and such others as also *tilaka* are grown from seeds.

15. Those also grown from seeds are *jambira, nimbuka, sadaphala, bijapura, naringa, seva, karamardaka, champaka* and the like, *karni, vidama, kamala, panduraga, shyama, atimuktaka* and others.

[*Karni* could not be traced but *karnikara* as the name of a flower is well known. *Vidama* could not be traced; probably it is coined from Hindi badam. *Prunus amygdalus* (?)]

16. *Jati, gulala* (not found as name of a tree), *taruni* (not found as a name of tree or creeper), *navamallika, malli, japa, tarala* (given as 'thorn-apple' by Monier), *kunda, shikhandi* (given as a shrub by name *Abrus precatorius* L. by Monier), *kubja, tambulika, salila, ketaki, ketaka*, and such others are grown from stalks. Only a few are stated here.

[*Salila* could not be found as name of a tree but it means water. Could it also be an aquatic plant as suggested in the case of *ambu*, which also means water? alternatively, could both *ketakambu* and *salilaketaka* denote some variety of water growing *ketaka*]

17. *Bimba, snuhi, chandraka, sinduvara, shrikhandika, ashvattha, vata, palasha, dadima, plaksha, munidru, vamsha, draksha* and such others are grown both from stalks and seeds.

18. *Kumkum, shringavera, vidarika, surana, pitika* etc., grow from bulbs. *Ela, ambuja* and such other plants are propagated both from seeds and stalks. Such is the opinion of the wise.

19. *Rambha*, etc. are grown both from bulb and stalk. The wise should similarly infer other plants suitable for growing in gardens after observing and consulting garden keepers.

Trees near residence

20. Trees that should not be grown close to residence and in the wrong directions are now listed.

21. *Bijapura, jambu, haridra, badari, palasha, shleshmata, chincha, arjuna, kanchanara, karanjaka,* and *aksha* are inauspicious and should not be grown in the home gardens.

22. One should particularly avoid growing thorny trees and trees that ooze out a milky sap, either in the garden or in the vicinity of the house. For their own well-being, people should cut off trees, which do not yield fruits even though such trees are found growing there naturally.

23. All trees which do not yield fruits or flowers as also all the wild varieties of trees like *ankola, bibhitaka, eranda, siddhartha, nilika*, etc., must not be planted in the home gardens.

24. All trees, creepers, bushes that yield flowers and all those which are known to produce fruits, medicinal plants

as also *arka* and such other trees, should be grown in the home garden.

25. *Vata* is auspicious if planted to the east of the house. So is *udumbarika* to the south. *Pippala* and *plaksha* are auspicious in the west. The northern quarter should not (?) be excluded.

[The text here appears to be defective as it gives the opposite sense to what from the context appears to be the intended meaning. The particle '*na*' appears to be out of place. Replaced by '*tu*' it would mean, 'one should, however, desist from laying a garden to the north of the house'. This appears to be the intended sense as no tree is recommended for planting in the northern direction.]

26. This rule (about not planting certain trees) holds good if . . . * or if the garden is situated on the outskirts of the village. However, at a far away distance from the village all trees, even those that are forbidden (for home gardens) should be planted.

[*One line is defective.]

27. Gardens must not be laid to the southeast, south, and northeast of a city. They are auspicious when planned in the east (reading '*sarva*' as '*purva*'), west or north of the city . . . *

[* Unintelligible text.]

Plantation inside a fort

28. Depending on the place available, an ordinary garden of desirable measurements should be planned even inside a fort. All trees, whether forest varieties or cultivated ones, can be planted there without any harm.

29. *Champaka, malati, kurabaka, nirmalika, yuthika, shrikhandi, kanavira* (*karavira*?), *kunda, bakula, vasantika, sevati* (appears to be of non-Sanskrit origin), *karni, kubja, gulala, hemasumana, sindurika, ketaki, bandhuka, machakunda, ketaka, japa*, . . . *, *kimshuka* should all be planted in it. These are the flower yielding kinds.

[* *Ketaki* appears twice in the list. The word '*nihmallimu*' is unintelligible besides being a misfit in the meter and is left untranslated.]

30. *Malura, badari, rasala, karaka*, . . . , *shriphala, chincha, mardaki* (perhaps short for *karamrdaka*), *nimbu, puga, phirasa* (could not be traced; appears to be of non-Sanskrit origin), *nuta* (could not be traced), *vata, ashvatthaka, kharjuri, panasha*, *kapittha, karaha* (could not be traced), and the beneficial *sanjirika* (could not be traced), *vamsha, udumbari, shala, tala, jatila, rohitaka, patala.*

[The verse gives only the list of trees. The sentence runs into verse 32.]

31. *Rajadana, ashoka, kadamba, jambu, jambhira, naringa, sadaphala,* and such others, *bijaddhya* (synonym for *bijapuraka*), *rambha, amlaka, dadimi, nalikeri*, those called *kamala* and *kala.*

[This is also a list of trees in a sentence with its predicate located in verse 32].

32. *Ashota* and *pista* (both are evidently non-Sanskrit words), *lakucha, vidama, tambula, kailasha* (not found as a name of a tree), *shatapatri*, *mridvi* and also such other trees, creepers and bushes yielding flowers and fruits should be planted (in the garden inside the fort.).

33. A wise person should plant *karamardaka, vamsha,* etc., to the east, *draksha*, *paravata* etc., to the south and *kapitthas* to the west.

34. He should plan the plantation of other trees commonly observed on the land, in the north. Similarly he should plant the trees as per their class, viz., highly distinguished, mediocre and inferior, both in a garden and in a forest.

35. Thus the third chapter of Vishvavallabha dealing with soil testing and propagation of trees is completed here.

Here ends the third *Ullasa* of Vishvavallabha, composed by Shri Mishra Chakrapani.

Chapter IV : Propagation and plantation

Plantation

1. Rainy season is the best time recommended for sowing all types of seeds and planting trees, etc., They should be planted after it rains. Autumn and spring are mediocre seasons for the purpose.

2. Winter and summer are both contraindicated for plantation. A senior planter may plant trees if advised by some (local) people. All seasons are equally good for plantation when extra effort is put on watering.

3. An ordinary land with soft soil is good for planting all types of trees and sowing all types of seeds. The special type of soil recommended for certain trees is explained hereunder, describing its color and so on.

4. *Udumbari, tinduka, vira, chincha, vata* and trees of its class, *rajadana, champaka* and trees of that class along with *vamsha, jambu,* and *pichu* can grow even in a rocky terrain.

5. Trees, creepers, and bushes either grown in villages or in forests, do not grow in a soil infested with stones. *Rajadana, bakula* and *champaka* cannot grow in a soil mixed with mica.

Land infested with white mica or chalk and the one that is mixed with metal particles is not favorable for plantation . . .

[Two lines are missing here. Also there is some confusion in the numbering of verses.]

6. Twigs without shoots are good for plantation. Those with shoots are mediocre. Those with flowers and fruits are inferior and must not be planted, as trees do not grow from them.

7. In summer, branches with leaves are good for plantation. Those with shoots should be planted if rainy season is to start shortly. In rainy season branches with

well-formed thick stem should be preferred for plantation. (According to some, trees should be planted in the *vasanta* (spring) season. According to others they should be planted after the rainy season.)

8. A field from which ripe grass (or *harital* (?)), *masha,* and *tila* are completely cut off and which is plowed repeatedly is suitable for a garden.

If one suspects existence of termites etc., one should plant *ajagandha* and *shatapushpi* (fennel) in that place.

9. Pits should be first kept ready heating them from inside and filling with soil. Seeds should be treated with dry cow dung and then with clarified butter and honey.

10. After rubbing them in dung or after smearing them with a mixture of ashes of *tila* plants and seeds and clarified butter, the wise should sow them at proper places.

11. Even an old seed (alternatively, a large cumin seed), when smeared with *ankola* oil sprouts quickly. *Sarshapa* seeds thus sprout with two leaves just within a day.

12. After planting *puga*, or *nalikera* even along with the bark, in a pit or in a proper container filled with sand, it should be fed once with salt water and then sprinkled with plain water everyday. They grow within a month.

13. Fruits of *akhota, puga,* and *trinaraja* as also of *kharjuri, kharika, badama,* and *nalikera* should be wetted with *ankola* oil, dung, and milk and sown in pits filled with good sand. It should then be sprinkled with plenty of water.

14. The wise should then cover the place where seed is sown with grass or leaves of *palasha* till sprouts appear.

15. Then the saplings should be dug out along with roots and soil and smeared with *bidanga*, clarified butter, and honey and then planted finally in the pits.

16. The wise should smear the branches, roots, and trunks of trees with cow dung and plant them in pits filled with soil and dried dung sprinkled liberally with water.

17. Mediocre, superior, and inferior types of trees should be planted at a distance of sixteen, twenty, and twelve *karas* from each other, respectively. But this is an old theory.

18. Grass, bush, and creeper varieties should be planted leaving the distance of four, three and two *karas* at an appropriate location in designs of *vithi* (line or row), swastika and circle.

19. Big trees should be planted at a distance of twenty, medium ones at a distance of sixteen, and smaller varieties at a distance of twelve *karas.* Such is the rule made by some others regarding interim distance. But in my opinion–

20. —*karni, badama, lakucha, amlaka, bijapura,* and *dadima* should be planted leaving a distance of five, seven and ten *karas* in between.* *Champa* and others

of its class should be planted with seven, ten, and twelve *karas* distance in between and *chincha, rasala, rajadanaka* at a distance of sixteen and twelve *karas* from each other.

[* This line is metrically defective.]

21. If trees are planted densely their branches are stunted. If planted too sparsely they are swept away by strong breezes. Hence all the trees should be planted along with their own class, considering their diameters.

22. *Ashoka, punnaga, shirisha, nimba, champaka* cause happiness and *mridvi, jati, phalini* and such other creepers are auspicious. So these should be planted first in a garden.

23. Thus I have stated in brief the method of plantation of some trees. The fourth chapter ends here.

Thus ends *Ullasa* IV of Vishvavallabha composed by Shri Mishra Chakrapani.

Chapter V : Water management

Watering

1. A newly planted tree should be sprinkled every morning and evening if it does not rain. It should be supported with sticks etc., fixed close to it so that it is not disturbed by a stormy wind.

2. By digging a basin around, it should be watered punctually. A discerning planter should also fill the basin with appropriate, good soil.

3. When after water is filled in the basin, it does not dry even after being used by the tree (after a considerable time) the next watering should not be done again till the water remains. The wise call this condition 'digestive disorder'.

4. If without sun's heat leaves of a tree fall and look frail one should always know that it needs nourishment and should water it.

5. In rainy season plants should be watered at mid-day. In winter they should be watered in the morning, in the spring season they should be watered in the afternoon, and in summer trees should always be watered in the evening.

6. Thus I have described the method of watering the trees as per the season and the condition. The fifth chapter of the book ends here.

Thus ends *Ullasa* V of Vishvavallabha composed by Shri Mishra Chakrapani.

Chapter VI : Protection and care

Protection

1. Storm, frost, smoke, fire, insects, cobwebs and rats can endanger the trees. So one must strive hard to protect the trees from them.

2. By fixing sticks around the plant to support it, there would be no danger to it from strong wind. By selecting

a proper site for the garden, safe from fire, trees can be guarded against the danger of smoke.

3. Trees planted in designs of *mandapa,* etc., should be vigilantly protected from fire. In grassy lands, they should be protected from conflagration. Destroying the rat holes, using medicines and mantras written on leaves are the remedies for protecting the trees from rats and insects. The mantra which is given in Sarangapaddhati is as follows:

'*Om*! *Swasti*!! . . . *Hum*! *Phat*!' i.e. ('Hail! May good prevail!) Hanuman, who disappeared after showing his valor to the world, revitalized by Indra (?),* commands the rats, moths, ants, grasshoppers, *karabhas* (could not be traced as a name of pest), . . . ,insects, *gandhika* (could it be *gandhila* which means wasp?), . . . must not stay here. If they do, they will be punished with physical seizure. He moves like a lion among the apes, roars like a cloud in a storm, the sound of which crossed the boundaries of ocean. *Hum*! *Phat*!'

[*The text is corrupt at several places.]

4. After writing this mantra properly on a leaf, and muttering the same it should be kept beneath the ground after digging a little. Insects, moths, rats, ants, etc., then disappear.

5. In between smaller trees, the wise planter should plant densely in the field *shatapushpa* and *kuberakshi* as a result of which he can get rid of insects.

6. He should also protect the smaller varieties when they are young, from frost by constructing temporary sheds covered with grass etc., and by spreading leaves (around the trunk).

7. He should treat the roots with powdered sesame and sprinkle ashes over it. Cobwebs can be removed by cloth or grass fastened to an end of a stick or by a feather of a bird (peacock?).

8. Clever planters should protect all trees by constructing a temporary shade, or by fixing thorny plants or by digging trenches or by some other device as per the season.

9. The sixth chapter of the book Vishvavallabha, dealing with the protection of trees, agreeable to the minds of the learned, ends here.

Thus ends the sixth *Ullasa* of Vishvavallabha, composed by Shri Mishra Chakrapani.

Chapter VII : Nourishment and growth

Nourishment

1. Having protected the trees in all possible ways, one should strive for their healthy growth by using special nourishments and medicines, etc., I shall now describe nourishment formulas, the application of which is frequently experienced. In other works many more, requiring the use of animal flesh are stated.

Kunapa, the liquid manure

2. Fat, marrow, skin, blood along with the marrow secretion of ram, sheep, deer, fish and so on should be mixed with water and cooked on fire. When properly cooked, milk and cold water should be added.

3. Oilcake of sesame, honey, and clarified butter should be added to the mixture and the pot should be removed from fire to be kept in a warm place for a fortnight. This liquid called *kunapa* is nourishing for trees.

4. Milk mixed with water is good for the growth of *tinduka* trees, *priyalabhasma* (ash from *Buchanania lanzan* Spreng.) for the coconut trees, and water removed after washing rice for *amra* and other trees . . . .*

[*The last line of the verse is missing.]

5. *Kharjura, bilva, lakucha, ashana, nalikera,* and *akshotaka* grow well when fed on powdered *sarshapa* and *tila*. *Panasha, amra, madhuka,* and *champa* should be fed well with rice-water mixed with oilcake, except in summer.

6. Sprinkling with *kunapa* is always beneficial to all the trees for increasing the produce of fruits and flowers. Especially in the case of *dadima* trees even fumigation with its vapours results in fast growth of big-sized fruits.

7. When *dadima* tree is smeared with a mixture of fish, clarified butter, and *triphala* (*amlaki, bibhitaki,* and *haritaki*) and is then fumigated with clarified butter and *triphala,* its fruits ripen well besides being large in size.

8. *Dadima* trees grow healthy if sprinkled with decoction of *kulattha* powder and if filled at the root with earth sprinkled with decoction of *karpasi* seeds and cattle dung.

9. Soaked *masha* along with the water is stated to be good for the growth of fruits of old *amalaki*. All trees produce sweet fruits when sprinkled with milk.

*

16. *Draksha* grows quickly and yields plenty of flowers and fruits just within the winking of an eye (as it were), if sprinkled after feeding the root on faeces of cocks.

[*Six verses (nos. 10—15) are missing.]

17. *Champaka* and *keshara* are nourished well by *priyangu, siddhartha, vacha, haridra, bidanga, gunja, tila, nimba,* and *krishma (krishna?)* churned in a mixture of clarified butter, *ashvakarna* and water.

18. *Panasha* grows well with certainty yielding quickly plenty of very sweet, tasty fruits when sprinkled with water mixed with *vacha* keeping a stalk of *palala* in it.

19. *Madhuka* bears plenty of flowers when sprinkled with decoction of *koshataki* leaves and *shipha* in combination with *krishna*. That the same result follows also when it is thoroughly fumigated by the same mixture is indeed a wonder.

20. If the branches of *madhuka* tree are kept under restricted growth by tying them with a thick rope, made of *kodrava,* it bears plenty of flowers even when it is small.

21. *Kapittha* and *bilva* yield sweet and seedless fruits if after feeding with the powder of *madhuka* mixed with milk, clarified butter, and honey at its root, it is also watered with the same mixture.

22. If *bijapura* is treated with mixture of *bidanga* and dung of ram, wild goat, and pig and if later it is sprinkled with water mixed with horse urine it certainly bears plenty of fruits.

23. *Badari* is enriched with fruits if treated with water mixed with honey, *yashti*, and *tila*. *Patala* bears beautiful flowers if sprinkled with water mixed with decoction of *karpasi* seeds.

[Third line is defective.]

23. (23 a) If sprinkled with *tila* water, clarified butter, and manured with fish and meat, *shephalika* and *pitika* blossom in a day.

24. Sprinkled with decoction of *masha*, meat, raw sugar and milk, *naranga* tree bears large and juicy fruits.

25. By sprinkling water from gruel prepared by fermenting *karkandhu, methi*, *tila*, buttermilk, *rodhra,* and curd, then *priyangu, punnaga, kadamba* trees produce fragrant flowers within ten days.

26. *Jambu, amra, ashoka, dhatri, kamalakha, lakucha* . . . should be scratched at the root and a mixture of *jambala,* milk, *rodhra*, along with honey, clarified butter and *tila* should be applied. Then they should be sprinkled with water mixed with honey and milk for a period of ten days. This procedure makes even the unproductive trees produce fruits sweet like nectar.

[Defective text.]

27. *Lakucha* yields plenty of flowers rich in fragrance within ten days if after depositing at its root a mixture of *tila*, raw sugar, and *bidanga*, it is provided with powder of *madhuka* flowers along with good quality earth and sprinkled with water mixed with *kola* root.

28. It is beneficial to scratch the *chuta* tree in the spring season for the growth of blossoms as per the advice of the sages.

29. Ashes prepared out of rice and cow dung are good for *kadalis*. Decoction prepared from the husk of rice is particularly beneficial for *trinadru*.

30. *Ashoka* gets rich blossoms after being kicked by a beautiful lady, if it is smeared with clarified butter and reddish soil and sprinkled with water mixed with *kola*.

31. *Bakula* blossoms when a charming lady, spits liquor on it, *tilaka* by her embrace and *ashoka* when struck by her kick.

32. A *pankaj* creeper smeared with soaked *masha*, clarified butter (?), anthill mud, and honey will emerge out of mud everyday with fully blown lotuses.

33. *Ketaki* will have very fragrant leaves if sprinkled with fragrant water in summer and with *kunapa* water at the advent of rainy season.

34. All trees planted carefully, fumigated with clarified butter prepared from cow's milk, nourished with good soil and sprinkled with water thickened with the mixture of any young female animal's* marrow, blossom extremely well.

[*'*Grishti'* generally means a young cow who has delivered a single calf. It also means any young female animal.]

35. It is in the interest of *amra* tree to wear a ring of a broken pot on its top, while *dadima* wearing a dead blue jay leads to good results according to sages.

36. A good sprinkling at the root in the basin with oil mixed with *bhillata* root, *yava*, *milk*, *bidanga*, and with water mixed with *indrabija* and depositing dried cow dung in the soil as also a fumigation with the same is conducive to the growth of trees removing their impurities.

37. A powder of *siddhartha*, *kadali* leaves, *shaphari* fish, and dung of hog and cat all taken in equal proportion mixed with clarified butter is beneficial for the growth of trees. When used for fumigation and smearing of trees, it acts as a strengthening medicine removing ailments and the bouncy tree, covered with blossoms looks healthy with branches and leaves so also with fruits.

This is Sarangadhara's verse.

38. Smearing with *bidanga*, honey, and *tila*, fumigation with clarified butter, good soil in the basin, and sprinkling with water mixed with *yava* and milk as also with *kunapa* will be very helpful for the growth of newly planted trees.

39. Fumigation and smearing with *unmatta, vatarika, mallika*, mixed with *sinduvara*, *tila* and *masha* and with *yava*, clarified butter, and honey mixed in milk as also sprinkling with water with the same mixture is also helpful.

40. Equally beneficial is smearing with *sunthi*, clarified butter, honey, *bidanga,* and *kushta,* fumigation with husk and *bidanga,* and sprinkling with water or *kunapa*-water, especially in the case of trees with a milky juice.

41. Filling basins with good quality soil, sprinkling at roots with urine of goats, fumigating thoroughly with its vapors and sprinkling with water is immensely helpful to rid the trees of diseases and to make them grow healthy.

42. Sprinkled liberally with marrow of hog and deer and with decoction of *kola* and watered with a mixture of clarified butter and honey, all trees grow well, free of diseases.

43. Treated with *siddhartha* (white mustard) all trees grow healthy, rich in foliage and blossom, and yield a lot of fruits.

44. Small balls prepared with candied sugar, *madhuka* flowers, *yashti, kushta*, clarified butter, and honey should be kept at the roots of trees.

45. These are some of the recipes considered good for the nourishment of trees. . . .

The rest can be deduced from them. Whichever are beneficial for trees in their respective locales . . .

[Incomplete verse.]

46. Thus this seventh chapter of Vishvavallabha devoted to the directions regarding nourishment, composed with clarity, is suitably completed.

Chapter VIII : Diseases and treatments

1. Trees may acquire disorders of *vata* (wind), *pitta* (bile), and *kapha* (phlegm) due to pungent and strong, bitter, heat generating and salty, and (excessively) sweet, sour, oily and salty decoctions.

2. Like human beings, trees also suffer from diseases due to imbalance in wind, bile, and phlegm. As such, I shall describe hereunder, their symptoms and remedies.

3. Although well nurtured with water, nourishing substances, and manures, trees are subjected to ailments, if eaten away by insects, etc., if wounded, if scorched with frost or with fire, and also if struck by lightning.

4. If broken by strong wind, affected by age, hurt due to rubbing (against branches of closely planted trees, etc.), if shifted to another location, and if too many birds take shelter on them,

5. —if too sparsely spread out, if affected by any corrosive, acrid or saline substance*, if troubled with too much medication etc., if wrongly treated or diagnosed, if starved, and if imbalance in wind, etc., occurs.

[*Defective text.]

6. These are the chief causes leading to the suffering of trees. So every effort should be made to find out the cause of suffering and to adopt corrective measures.

7. There are some trees and creepers originally belonging to other countries. They just do not grow here after planting saplings or sowing seeds.

8. That is due to unsuitability of this soil, of (indigenous) seasons or of its natural properties*, and due to lack of complete knowledge regarding their nurturing and care or due to god's will.

[*Unintelligible text.]

Wind related disorders

9. A tree affected by wind disorder is dry, small, slender, tall, sleepy, and faded. It bears no, or very few, flowers or fruits.

10. Trees suffering from wind-related diseases should be sprinkled with bitter juices of plants (to generate heat in plants) with watery decoction of oily flesh, or should be sprayed with powdered cow dung.

11. Wind disorder of trees can be set right by sprinkling water mixed with *nirgundika*, *aragvadha*, leaves of *panchashakha*, and *ambu*, or by smearing their roots with the same mixture with the addition of *tila*.

12. Covering the tree, feeding it with oilcake, sprinkling with goat's urine at the root, and sprinkling water mixed with *kulmashaka*, goat dung, bark of *amra* tree, and *ashvagandha* are also desirable measures.

13. Trees suffer from dryness* and develop knots of the size of small balls due to wind disorder. Smearing with a mixture of cow dung, *bhallataka,* and marrow or sprinkling with *kunapa* can cure these.

[*Reading *Kauksha* in the text as *rauksha* with the help of Upavanavinoda-182.]

14. Sprinkling with decoction prepared with *rasna**, *ashvagandha, pavanari, naga,* and *kana* or with water mixed with *shatapushpika* can cure the wind disease in a tree, even in its advanced stage.

15. Fumigation with a mixture of *nirgundika, guggula, shepha, sarpi, kubera, netra*, seeds of *asana* as also filling goat dung and oilcake at the root yield favorable results in the treatment of wind disorders.

Bile related disorders

16. A tree suffering from a disease caused by imbalance of bile is slender, has pale whitish leaves . . . * and has dry branches. It cannot stand the heat of the sun. Its fruits ripen at an odd time of the year.

[*Defective text. Reading *sushpa* in the text as *shushka*.]

17. Oily, cool, and sweet juices and sprinkling with cool water mixed with cow's milk, *sita* and *vida** cure the bile-imbalance in no time.

[The verse is metrically defective. **Vida* is stated to be a kind of medicinal salt. 'A kind of salt either factitious salt procured by boiling earth impregnated with saline particles or a particular kind of fetid salt used medicinally as a tonic aperient commonly called *vit-lavan* or *bit-noben,* it is black in color and is prepared by fusing fossil silt with a small portion of emblic myrobalan the product being muriate of soda with small quantities of muriate of lime sulfur and oxide of iron'– Sushruta as quoted by Monier William.]

18. The bile imbalance can be cured if treated with *ushira, musta,* honey, milk and *sarpis* or if the tree is smeared with *jambala* . . .* or fumigated with *sita*, honey, and large quantity of clarified butter.

[*Defective text.]

Phlegm related disorders

19. A tree suffering from phlegm disorder has oily leaves and bark; whitish, undersized flowers; slimy and tasteless fruits. Round in shape it is encircled by creepers. It develops shoots with delay.

20. Pungent, hot, dry, and bitter decoctions and juices quickly set right the phlegm disorder. A tree suffering from phlegm gets relief if sprinkled with warm water, too.

21. Decoctions prepared from barks of *plaksa, arjuna, udumbari, saptaparna*, and *nimba* as also of *vasa, ghana* and *rohita* are prescribed for trees suffering from phlegm.

22. Sprinkling with decoction prepared from *vyaghri, sahachara, arishta, vasa, khadira,* and *rohita* is beneficial for trees suffering from phlegm.

23. A tree totally affected by phlegm too, can recover normal health without any doubt, if treated with decoction of *marudbhava* (*marutsambhava*=radish), *amrita, vasa, vyaghri,* and *rohisha** (kind of grass).

[*Defective text.]

24. Smearing with the paste of *madhu*, *katphala* mixed in the juice of *vyaghri* is very fruitful for trees suffering from phlegm. Within a week the trees are densely covered with leaves.

Disease of indigestion caused by excessive watering

25. Sleeplessness, paleness, falling of shoots, drying of branches at the end, infestation by ants, foul smell like that of fish are the symptoms of the disease caused by excessive watering.

26. Making incisions with gentle strokes of a sharp axe, an expert should allow the fluids produced by the disorder to flow out from the root of the affected tree proportionate to its size and then should smear it with paste of *bidanga*, honey, clarified butter, and *tila*, fill fresh soil in the basin and sprinkle it with a mixture of milk and water. The tree will be freed from the ailment.

27. It is also helpful to provide the tree with ashes of barks of *plaksha* and *arjuna* and reduce the quantity of water . . . . *.

[* Incomplete verse.]

Indigestion caused by excessive intake of food (manure)

28. Due to indigestion caused by excessive intake, trees do not produce leaves. They are infested with ants and their (existing) leaves become dry.

29. *Triphala* (*amlaki, bibhitaka,* and *haritaki*) and *kuberakshi* provided at the root followed by watering and smearing with paste of *bidanga*, *ingudi*, and honey are measures recommended for them.

30. Powdered leaves of *kankata* (vai?) provided at the root and fumigation and sprinkling with a mixture of honey and clarified butter frees the tree from indigestion.*

[* Defective verse.]

Overmedication

31. Due to overmedication, twig ends of trees dry, barks fall off, and leaves become sickly.*

[*Defective text.]

32. Applying paste prepared from the mixture of *karkandhu* and *chara* seeds, soaked in cow's milk, toxicity caused by medication can be cured.

33. After drenching thoroughly, the soil at the root should be removed and the basin should be filled with fresh soil. Then thickly smearing the tree with honey, clarified butter, and milk, a mixture of milk and water should be sprinkled.

34. Fumigation by a mixture of *sita*, clarified butter, and *guggula*, cures the disease of the tree and it becomes beautiful again with the growth of lovely foliage and healthy bark.

Insect related disorders

35. Without any disturbance in the three elements if a tree loses its shoots, branches dry at the end (dieback), bark falls off, leaves lose color and the tree appears very sickly, the cause should be traced to insects.

36. Insects are of two types, external and also internal. Some external insects live on bark while others on leaves, flowers, and fruits.

37. An insect named *kandaraka* (borer) lives in between the root and the branches. The tree can be destroyed when infested by it. As such it should be treated.

38. Insects originate from soil, water, and *dohada** (a kind of special manure). I shall state the remedies prescribed in the science.

[*According to Monier Williams, *dohada* is a kind of fragrant grass used in manure for which he refers to verse I-82 of Naishadhiyacharita by Shriharsha of 13th century. The word used there is *dohadadhupita* (fumigated by *dohada*), and is an adjective describing *dadima* tree. Mallinatha, the commentator of the epic, explains the word *dohada* quoting its definition from Shabdarnava, a lexicon. There it means, 'Any substance used by the experts to produce out of season, flowers, etc., on trees, creepers, bushes etc. and the process thereof'.]

39. A powder prepared from the barks of *aragvadha, arishta, karanja, saptaparna,* and *bidanga* soaked for a night in cows' urine and pasted on the affected parts of the trees frees them from external insects.

40. A paste made from the mixture of *bidanga, siddhartha, trikatu,** cow's urine, *bhallata,* and *vacha*, applied to the tree destroys insects living in between the branches retrieving the color of the barks.

[* This is an aggregate of three pungent substances like ginger, black and long pepper or like dry ginger, pepper, and *pippali* (*Piper longum.*]

41. Fumigation by the mixture of cow's horn, *bhallataka, nimbu, musta, vacha*, *vidanga, ativisha, karanja, sarja, siddharthaka*, and *sinduvara* draws out insects from within the trees.

42. Applying paste of dung of cat, jackal, and hog mixed in *siddhartha* and cow's urine, draws out insects hidden inside the trees and fumigation by the same mixture along with clarified butter wipes out the external ones.

43. Fumigated with a mixture of *nimba, siddhartha, vacha, vidanga, hingu,* and barks of *arjuna*, in combination with *tila*, milk, and water and sprinkled

with a mixture of milk and water a tree infested with insects (is freed from the pest and) once again becomes green with (a new growth of) branches and tender leaves.

44. All trees can be relieved from insects by sprinkling water mixed with fruits and bark of *ingudi*, and raw sugar. By applying a paste of milk, clarified butter, raw sugar, and *ingudi* or by fumigating with the same and by tying dog's bone on them, will rid the trees of insects.

45. When *palasha** tree, planted in between other trees, bears fruits, it prevents the water related diseases and water-borne insects from infecting other trees as does *ashoka*.

[**Palasha* is said to attract all insects.]

Treatment of pruned trees

46. Sprinkling with water mixed with cow dung, over the top, filling soil mixed with cow dung in the basin, and smearing with the paste of *bidanga*, honey, clarified butter, raw sugar, and milk cause growth of new shoots on a (partially) pruned tree.

47. If after anointing with *ankola* oil, mud from a borrow pit is applied to a pruned part of the tree and it is sprinkled with a mixture of water and milk, new shoots definitely grow on it.

Frost burn

48. A frost burned tree shoots forth if a paste of *ankola*, milk, clarified butter, and honey is applied to the root, if fresh soil, cow dung and oil are provided, if sprinkled and smeared with *tila* and milk and sprinkled in the end with water.

49. Shoots grow again on a frost burned tree, also if its root is treated with powder of *tila* mixed with that of *bidanga*, *kulmasha,* and *ayas* (iron), and if it is smeared with a thick paste of the same preparation with *ankola* oil.

50. The tree produces plenty of shoots if the root is provided with ashes of cow dung, if sprinkled with decoction of *nirgundika* and *shopha,* and if smeared and sprinkled with hog-marrow.

Fire burn

51. A tree burned by fire grows leaves again if sprinkled with a mixture of milk and water, if anointed with honey mixed with lotus bulb (*padma*) and water, and if the basin is filled with ample, fresh soil.

52. A tree burned by fire also produces shoots if a paste of *karkandhu*, marrow, and honey is applied, if smeared with mud and sprinkled with *kunapa*, and if fully anointed with milk and *atasi*.

Lightning

53. A tree struck and burned by lightning does produce shoots in no time if it is liberally sprinkled with powdered *madhuka*, *mudga*, *tila* and *masha* gram mixed in milk along with *yava*.

54. A tree struck by lightning produces new shoots also if a paste of *ushira, musta,* honey and milk is applied and if sprinkled with water mixed with *sita, vidari, tila, nagajihva*, and flowers of *kumudvati*.

55. A tree produces shoots at the burned portion too, if a paste of cooling substances like lotus bulbs, algae, and mud are liberally applied and if sprinkled with water so that the application does not dry off.

Wind

56. A tree wrecked by wind should first be supported by props and secured by tying a rope. Then a paste of barks of *plaksha, amla*, and *udumbara*, honey, clarified butter, *sita,* and milk should be applied to the wounded area. Soil mixed with *plaksha* and dried cow dung in ample quantity should be filled at the root and the tree should be sprinkled with a mixture of milk and water. Treated thus, the tree recoups (from the injury) and is once again densely covered with leaves and branches bearing foliage and producing rich yield of flowers and fruits.

[Defective text.]

Friction

57. A tree afflicted by friction (with nearby trees etc.), even though old, becomes healthy, along with the affected (rubbed off) part (?), yielding a rich produce of fruits again, if fresh soil is filled after digging at the root and then sprinkled with the mixture of milk and water.

Transplantation

58. A tree shifted from its place and transplanted should be sprinkled with a mixture of *bidanga*, milk, and water and the root with *madhuka* powder and water. Fresh soil mixed with cow dung should also be filled at the root.

Trees ruined by animals

59. If animals like elephants, etc., that take shelter under a tree and damage it, dry cow dung powder should be spread beneath it and set on fire. Fresh soil in the basin at the root, application of honey and clarified butter and sprinkling with a mixture of water and milk should then follow.

Contact with unhealthy trees etc.

60. The (unhealthy) tree located in the midst (of other trees) should be cut off, as a result of which other affected trees can be cured quickly. If fresh soil is filled, digging out the old one, and then it is watered, a tree afflicted due to unhealthy soil is cured.

61. Alternately, if the affected tree is young, it should be shifted to a new place. After preparing a pit, burning it, and filling good soil, a tree afflicted by unhealthy soil should be replanted and watered profusely.

Contrariety regarding seasons*

[*The title of the topic is left half finished in the text.]

62. If contrariety with reference to the seasons is observed in a tree and if it does not respond to *dohada*–(a special kind of manure or treatment of trees believed to trigger blossom)–it needs attention. It should be sprinkled with *kunapa* and water mixed with milk.

63. The tree should be carefully protected by esoteric methods like mantras, *yantras* (a mystical diagram supposed to possess occult power), *tantras* (magical and mystical formularies) and propitiation of gods by those, proficient in the respective field.

64. Digging earth near the affected tree, *tila* seeds should be sown. Fresh soil should be filled in the basins. The trees should be smeared with milk, clarified butter, and water. Sprinkled with water mixed with milk, bark of *arjuna* and *bidanga* is helpful in increasing the yield of fruits and flowers of trees.

Lapses in the mode of treatment

65. Sprinkling with water mixed with milk can cure a tree suffering due to lapses in the mode of medication and make it fit to yield more fruits and flowers. Application of paste prepared with the mixture of *tila*, milk, clarified butter, and raw sugar and sprinkling with the same mixture are also helpful.

66. If the tree comes in contact with wrong medicines, etc., the wise planter should remove the old soil and fill the basin with fresh soil.

67. A tree, from which its sickly, pale leaves and fruits are falling down, the flowers of which are undersized and shoots curved, if not watered, would soon cease to grow shoots.

68. The tree can grow green leaves and normal fruits if fumigated with honey and clarified butter and sprinkled with water mixed with milk and *yava* powder and also with *kunapa*.

69. A planter in his own interest should follow the instructions stated earlier (Ullasa VII) and do whatever is recommended for whichever tree. A prudent farmer should always treat the trees with *tila* and oil etc., in winter.

70. Similarly applying the paste of sugar, *tila* and cow's milk and sprinkling the same, mixed with water, all the dehydrated trees are completely cured.

71. If in spite of right treatment, a tree does not grow due to the disease, it should be transplanted at another place, if young.

72. All trees are normally relieved from common ailments by the application of clarified butter, prepared with *katvanga, bhillota, vacha, vidanga, siddhartha, krishna,* and the two types of *rajani,* mixed with milk.

Discharge

72. Discharge of fluids from trees can be cured with application of barks of *dhava, vetasa, tarkari, priyangu,* and *arjuna* prepared in milk.

73. Discharge of trees also stops if sprinkled with water and decoction of *tila*, *yava*, *shatapushpa*, *fish*, and

dhartura leaves. If sprinkled with a mixture of raw sugar, water, and milk, trees get complete relief and produce more flowers and leaves.

Preventive measures

74. Cook fragrant grasses, *vidari, padmaka, ushira, pathya, tagara, rajani, kushta, shri, bidanga,* and *rodhra* together measuring a *prastha* (=1/4 *adhaka*), in water, *surataru* (?) and milk and keep. Mixed with *tila* oil it cures (common) diseases of trees.

75. A mixture of *bidanga, rodhra, sita*, milk, and water is always good for health of all trees and creepers in winter.

76. Changing soil in the basin and sprinkling with a mixture of *tila*, milk, and water is particularly helpful to trees and creepers in winter.

77. Regular watering of all trees and creepers and attending to other requirements are essential duties.

78. Several remedies for ailments of trees are described in other works on this science. Here I have stated some of them, which have been actually put to use. Experts should prescribe the recommended medication after using their own discrimination.

79. The eighth chapter of Vishvavallabha, composed by Chakrapani, dealing with diseases of trees ends here.

Thus ends *Ullasa* VIII of Vishvavallabha composed by Mishra Chakrapani.

Chapter IX : Botanical wonders

Wonders of seeds

1. Take a fully ripe fruit of *kumuda*. Take out the dry seed. Rub it with dry cow dung and then keep it in buffalo's urine for seven days*. Sow the seed then, in faultless, pure soil. It produces *karavira*. What a wonder!

[*Here and in the following verses of this chapter I have taken the liberty of changing the construction of the sentences in the English translation for facilitating easy rendering and reading. In the original the construction would be 'If you take . . .' Also, defective text has been interpreted with the help of a verse (289) of similar contents in Vrikshayurveda.]

2. Take a seed of *madhuka* or *amra*. Keep it for seven days in water in which fish and flesh are cooked. Take it out and dry it in hot sun. Keep it according to procedure, in a mixture of milk, clarified butter and *ankola* oil. When sown, it produces *brihati*. Seeing it, people are amazed.

3. Take a seed of castor and drench it with hog's blood and marrow. Let it remain in *ankola* oil for a day. When sown, it produces *karalla* (short for *karavella*?) creeper. How wonderful!

4. Take any seed and soak it in a mixture of marrow and flesh of hog and fish and milk of an ape (or any forest animal). When sown in earth it sprouts (climbs if it is a creeper) and yields fruits, too.

[The verse is defective and the meaning could be arrived with the help of verse No. 207. with similar contents in Upavanavinoda].

5. Make a hole in *dala* tree. Fill it with seeds of any (fruit) tree. Apply paste of calf dung. When the tree grows it bears fruits equal in size to the fruits, the seeds of which are filled in the hole.

6. Take a seed of *kushmanda, vartaka, patolaka,* etc. Soak it in hog's marrow. When sown and liberally watered, it bears respective fruits very big in size and without seeds. What a wonder!

7. Take a seed of *vartaka*. Roll it in a mixture of honey and clarified butter and dry in the sun. Make a hole in a tender *kushmandaka* that is hanging on the creeper and insert through it the above stated seed of *vartaka*. Close the hole immediately and apply cow dung. Extract it when (the *kushmandaka* is) ripe. When sown, it produces in its usual season fruits as big as *kushmandaka*.

[Defective text interpreted with the help of verse No. 218, Upavanavinoda.]

8. Take any seed. Smear it with *ankola* oil and the marrow of hog or alligator. After sowing, sprinkle it with coconut water. It sprouts in no time (literally, instantly). A great marvel!

9. Soak a seed of *amra* in the blood of rabbit and tortoise for twenty-one days. After sowing, sprinkle it with a mixture of milk and water. When it grows into a tree, it indeed, produces fruits in all seasons.

10. Take any seed smeared with *ankola* oil. Mix it with human blood. Take a handful of soil in the hand and sow the seed in it. Sprinkle water. The seed sprouts instantly on the hand itself. A great wonder in this world!

11. Take a bulb of *kumuda* and steep it in *ankola* oil. Soak it in cow dung. Place it in an earthen jar filled with coconut water and mud. It produces (*kumuda*) flower!

12. Dig a pit and burn dry cow dung and hog's bones in it. Fill it with sand. *mulaka*, sown (planted) in it and watered liberally becomes as huge as a pillar and astonishes the world.

Wonders of trees

13. Sprinkle a tree at the basin with a mixture of dung, *bidanga*, sugarcane juice, and oilcake. It bears flowers and fruits throughout the year, attracting the attention of everyone.

14. Dig a pit deep enough for a man-height. Cut it off from the rest of the soil by casing its walls internally with bricks on all sides. The tree planted in it bears fruits and flowers even as it is dwarf, always being a source of astonishment to the world.

15. Sprinkle *kadali* regularly at the root with a mixture of water and a decoction prepared from *ankola* oil and blood, flesh and marrow of wild boar. The wonder is that it yields fruits sweet like those of a mango tree.

16. Prepare a paste of *bidanga, yashti,* and *madhuka* in warm milk. Add *yava* powder and raw sugar. Scrape a

(fruit) tree and smear it with the paste. Sprinkle it with a mixture of milk and water. The original pungent* taste of its fruits becomes sweet.

[*Defective text.]

17. Prepare a mixture of *bidanga, yashti*, honey, sugar, water, and milk. Sprinkle it on a tree initially yielding sour fruits. It is a wonder that the very same tree bears big sized sweet fruits.

18. Allow *varahi* to stay for three days in the mixture of clarified butter, *kunchika*, *bidanga*, *raji*, raw (uncooked) clarified butter, and *triphala* (*amlaki, bibhitaka,* and *haritaki*) along with sugarcane juice. Smear the root of the tree with it. Fill fresh soil and fumigate the tree thoroughly with the same mixture. Sprinkle with sugarcane juice. The tree then produces flowers and fruits out of season.

19. Tear open (a part of the trunk of) a young tree and insert there, any seed (of a fruit-tree). Paste it with calf dung. When the tree grows it bears fruits similar to those, the seeds of which are inserted. How strange!

20. Heat lightly with fire, old tree, the trunk of which is cut off. Smear it then with a mixture of *kunapa*, salt, honey, clarified butter, and milk. Sprinkle well with a mixture of water and milk. Pierce it at the root with a sharp iron nail. The dwarf tree then bears flowers and fruits in proper season. What a wonder!

21. Scrape lightly a branch of a tree. Smear with a mixture of honey, clarified butter, *bidanga,* and milk and tie it with grass and bark. Sprinkle with a mixture of milk and water. Ripe fruits then stay on the branch for a long duration of time. That is the wonder.

22. Scrape the branch of a tree that has started producing fruits and tie a wet bark over it. The branch will bear the ripe fruits for a longer duration of time, causing even the wise to wonder.

Wonders with negative results*

23. Never sprinkle trees with water mixed with the decoction of *kulattha*. That ruins its flowers and fruits. Sprinkling with water mixed with salt, bark of *arjuna, karkarika* and *kimshuka* also acts similarly (adversely).

24. The fruits of a tree sprinkled with decoction made out of fruits of *chinchini, badara* and *partha* as also of one, the fruits of which are smeared with *nimbuka*, *ambu* and clarified butter, never ripen. That, indeed, is strange.

[The scribe has noted in the margin '*samudralavana*, *chinchini*' indicating that a decoction made out of ocean salt and *chinchini* also has the same adverse effect on fruit-yielding trees.]

25. Sprinkling with decoction of *kasa*, *rishabhi*, fruits of *partha*, small *kola*, *tapodhana*, *eranda, sira,* and *amlika* permanently ruins fruit-ripening of all trees.

26. Fruits do not ripen on the branch shooting from the trunk of a tree which is tied securely with skin of a recently killed goat.

[*These were perhaps practiced on the trees of rival planters or enemies.]

Wonders of flowers

27. Uproot a stalk of *hayari*, already planted. Keep it for three days along with the soil sticking on to its root, in a basin. Sprinkle it with water mixed with *ghana* and *ushira*. It then produces fragrant flowers, which is a wonder.

28. Smear the root of a (flower yielding) tree with a paste of *vidari* bulb and sugarcane juice. Sprinkle it with sugarcane juice by providing a basin. The tree then bears rich blossoms round the year, being an object of curiosity for people.

29. . . . Sprinkle a good *palasha* with hail water* and fumigate it with the smoke of *kunduru*. It always bears then . . . flowers of yellow color resembling *champaka* flowers.

[*Corrupt text.]

30. Sprinkle a (white flower-bearing) tree liberally with water mixed with *nisha, kimshuka, karpasi,* and *rodhra.* Its bark then gets a golden color and its white flowers turn golden yellow.

31. Similarly, provide a tree bearing white flowers with soil from Saurashtra, with *manjishtha, hingulu*, with milk and pigeon's blood mashed into it. The flowers of the tree will turn golden yellow.

32. Sprinkle a tree, the flowers of which are devoid of fragrance, with water mixed with *dhava, khadira, kapali, kushta* and fragrant substances or smear it with the same mixture. Provide it with soil, scented with flowers, at the root. The tree will then bear flowers laden with fragrance.

33. Sprinkle creepers like *yuthika, kanda, jaya,* etc. with a decoction of *ela*, bark of *nakha, tagara, ambu, kushta, masi, ghana,* and *ushira.* All of them then bear fragrant flowers.

34. Fill soft ashes at the root of trees and creepers and sprinkle them with mixture of milk and water. They, thus, always yield rich blossom.

35. Sprinkle creepers like *jati, nemali (nevali?), mallika* with water mixed with barks and leaves of *nakha, ambu, tagara,* and *ushira*. All of them will then bear very fragrant flowers. A wonder indeed!

36. Provide the trees and creepers with manure of powder prepared from barks and leaves of *ela, jata, ushira, ghana, ambu, kushta, chakra,* and *hanu* (both names of different types of *nakha*) and *jati* and sprinkle them with water mixed with the same. All will bear fragrant flowers.

37. Fill with soil and cow dung at the root the *kushmanda* creeper that has . . . *. When sprinkled, it always yields fruits of a large size.

[*Defective text.]

38. First provide a *jati* creeper with soft ashes at the root. Then fill the basin amply with soil and cow dung

and sprinkle with *kunapa* liquid. It then yields blossoms in the spring season.

39. Provide creepers with the manure of *yava* powder and pounded *tila* seed at the root. Fill with fresh soil and sprinkle with milk and water. When grown up, they reach the height of trees.

Wonders of fruits (according to other experts) – seedless fruits

40. Prepare a paste of *madhuka* flowers, *yashtimadhu, kushta*, and *sita*, in clarified butter and honey. Cover the root of a (fruit-) tree with it. It produces seedless fruits.

41. Scrape the trunk of a tree from where the branches shoot off. Insert the mixture of *gunja*, honey, *udumbara*, sugar, fresh clarified butter, and *madhuka* flowers. Paste with calf dung. The tree will produce seedless fruits.

Naturally colored cotton

42. Prepare a paste out of *jivantika* leaves, *manahshilala*, (material containing red arsenic) piece of wood of *manjishtika*, *nisha* and *yava*. Mix it with cow's milk, milk of goat and sheep. Add *tila* seed and apply the mixture to *karpasika*. The color (of the cotton produced) will be sky blue.

43. Fill at the root of a *karpasa* plant a mixture of plant a mixture of *yava, misha, palasha,* and *tila* and water it with the same mixture. The color of the cotton produced by it will be red.

44. Prepare a paste of barks of *triphala (haritaki, bibhitaki, and amalaki*) and *shalmali* in combination with *nisha, kushta,* and *sidhu* (spirituous liquor, distilled from molasses). Smear and also sprinkle *karpasi* with it. It produces cotton of green color.

45. Prepare a fine powder of *kasi, nili, tila*, copper, *yashti, vacha*, and both the varieties of *nisha* (*haridra* and *karpuraharidra*). Smear a *karpasi* with it and sprinkle it with water mixed with the same. It will produce yellow cotton . . .*

[*Incomplete line. The reference to *krikachulaka,* i.e., cock's crest which is red, is not clear].

Improving quality of produce

46. Sprinkle a *draksha* creeper with sugarcane juice after mixing *yava* powder thoroughly in it. Fumigate it with a mixture of fresh clarified butter and *bidanga*. It will surely produce sweet fruits when it ripens in the season.

47. Smear or sprinkle any tree or creeper with the above stated two mixtures. It will bear beautiful, tastier, and larger fruits although their original taste is sour.

48. Sprinkle the root of a sugarcane tree with water scented with the particles of *kasturika* (musk). When ripe, the sugarcane juice will be tastier and will have the same aroma.

49. Sprinkle sugarcane plant with water mixed with . . . *ushira, musta*, or *ambu* for a period of twenty days. The juice of the sugarcane will have the respective aroma.

50-51? I have recorded here some recipes useful in producing wonders. Experts should look for more in other works (on the subject) or learn them by observing others practicing them.

52. The ninth chapter of this book, Vishvavallabha, a source of delight to the learned, brilliantly describing the recipes of producing wonders has come to an end.

Lakshminarayana copied this book in the year 1925 according to Vikramsamvat, and 1790 according to Shalivahana shaka, on the ninth lunar day of the dark fortnight of *Phalguna*, for the reading of Bhaktavara.

Commentaries

Commentary

Nalini Sadhale[1]

Vishvavallabha is a treatise written by Chakrapani on the science of plant life, which closely resembles Surapala's Vrikshayurveda, and deals with the same subject. This contains information on the following aspects of plant life: Tracing of groundwater, construction of water tanks, lakes, etc., classification of land, instructions on propagation and plantation of various trees, watering and special nourishments for good results, plant protection and care, diseases of trees and their treatment, and botanical wonders.

'Vishvavallabha' means 'dear to the world'. The title 'Vishvavallabha' does not reflect the above contents of the book as the title 'Vrikshayurveda' does. The author might have named the book as 'Vishvavallabha' because the subject of plant life is dear to all. Although it appears self-eulogizing, he only follows the tradition in which titles like 'Jagadacharyapustaka' (= A teacher of the world), 'Sarasvatikanthabharana' (= The ornament for the neck of the goddess of learning) are not uncommon.

Many of the topics of Vishvavallabha listed above form part of Surapala's Vrikshayurveda too. In fact, Vrikshayurveda is a name of a science that deals with plant life and not of a particular text. In works of ancient scholars on this subject, like Varahamihira (6th century) (Bhat, 1981) and Sarangadhara (13th century) (Majumdar, 1935) the word vrikshayurveda is used in plural, signifying thereby that any book on the subject of plant life and tree-plantation would be called vrikshayurveda. While Kautilya in the 4th century BC already knew the existence of this subject as a well-developed science and references to it kept recurring in later literature, an independent treatise on the subject came to light only with the publication of Surapala's Vrikshayurveda in 1996 by the Asian Agri-History Foundation (AAHF), Secunderabad, India. It is a matter of a happy coincidence that within seven years, yet another work of the same merit and authenticity on the same subject, by an equally erudite scholar in the field, is now coming to light. This effort of bringing forth traditional wisdom was initiated by Dr Y L Nene, Chairman, AAHF, followed by a tenacious search by Dr S L Choudhary, Honorary Advisor, AAHF, Udaipur, in procuring a photocopy of the manuscript of Vishvavallabha from Rajasthan Prachya Vidya Pratishthan, Jodhpur in 2002.

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Customarily, authors of ancient Sanskrit texts provide information about their family history, date, preceptor, patron, etc., in the colophons of their texts. In some cases scribes include such information at the end of their copies. Unfortunately, in the present instance both the author and the scribe are silent on this. As a result, we do not have any direct information about the author Chakrapani even on these bare minimum facts, from his own text. We have to depend, therefore, on external evidence, which in this case is fortunately available and can be amply corroborated by the contents of the text.

History

In the Hindi book 'Maharana Pratap–Mahan', based on the life and history of Pratapsimha (1540—1597) the famous ruler of Mewar, who belonged to the Guhilot dynasty, Paliwal (1998) states that Maharana Pratap, besides being one of the greatest warrior-rulers of his time, also initiated and encouraged academic activities in several fields. He quotes in this connection, the name of Chakrapani crediting him with the authorship of three books:

1. Rajyabhishekapaddhati, dealing with coronation
2. Muhurtamala, a work on astronomy
3. Vishvavallabha, dealing with the science of plant life

Jawalia in his article too, mentions the same three as works of Chakrapani. (It appears from his account quoted from Muhurtamala that Chakrapani's was the fifth generation of this learned family enjoying continuous patronage of Guhilot dynasty). Being a great Sanskrit scholar and a physician, Chakrapani must have been, in his own right, a reputed person of Mewar in the latter half of the 16th century. He also had the fortune of enjoying the patronage of one of the most towering figures of medieval Indian history, the Maharana Pratapsimha of Mewar.

Chakrapani composed Rajyabhishekapaddhati, probably around 1572 AD (1569 according to Jawalia–see reference in Foreword) in the year Rana Pratap was coronated. According to his owṇ statement in the present text, he composed Vishvavallabha on being prompted by the 'king' (IA 4). Although he does not mention the name of the king, it can be easily inferred that he must be referring to Maharana Pratap whose patronage he enjoyed. Hence it is possible to guess that the author composed Vishvavallabha later than 1572, when after coronation, the king would have more leisure to pay attention to other academic matters. Bhandarkar (as quoted by Jawalia), in his 'Survey Report of the search of Manuscripts in Rajasthan', has ascribed 1577 AD as the exact date of this composition.

Predecessors

In the opening verse of Vishvavallabha, salutations are offered to the feet of Raghavendra and to those of the author's preceptor. Although the preceptor's name is

not mentioned, more than one distinguished personality named Raghavendra is referred to in medieval history of India. There was one Raghava (Chaitanya), an ardent devotee of Dattatreya, who lived in Girnar (Gujarat) around 1550 AD (Chitrav, 1937). His father was in the service of the Mughal rulers but Raghava despised them for the atrocities they perpetrated towards the Hindus. He was the author of works on yoga, *vedanta*, etc., and was a preceptor of Keshavachaitanya. It is chronologically possible that he is the one to whom Chakrapani has paid his homage. However, there is no evidence to prove this. Sanskrit writers usually offer prayer to their deity in the opening verses of their compositions which throws some light on their religious sect suggesting the creed that their preceptors might have followed, but the present author has not chosen to do so. Yet another Raghavendra is the more famous Raghavendratirtha of Karnataka, a *Madhva* by faith, who propagated the philosophy of dualism and established a *muth* at Mantralaya. He died in 1671. He could not possibly be the one referred to by Chakrapani who flourished in the last quarter of the 16th century. The contents of the present text clearly suggest that the author belonged to the medieval Rajasthan area (in present Saurashtra region of Gujarat) and the possibility of his having such connection with a saint in the south is remote.

At the end of each chapter of Vishvavallabha, the author Chakrapani mentions his own name as the composer of the work, both in metrical and prosaic forms, occasionally adding a word of praise for the work or for his own composition thereof. It is the ending verse of the first chapter (ID 16) that is noteworthy in the present context. The author says there that he has 'orally' explained the topic of groundwater currents following 'the sage'. He has preferred, however, not to mention the sage's name. One can guess that in all probability he is referring here to Varahamihira, whom he follows very closely. Alternately this must be a reference to the author's guru from whom he learnt the secrets of the science handed down by tradition. One may also reasonably guess that the author belongs to a period when the tradition of passing knowledge of various subjects orally to the disciples was still in vogue and the practice of disciples giving a formal written form to what they orally learned from their gurus was also common.

In Verse ID 1, the author specifically mentions the name of Varaha (Varahamihira, the author of Brihat Samhita). Yet another person that the author mentions by name in the text is Sarangadhara (14th century), the author of Sarangadharapaddhati and some works on Ayurveda like Sarangadharasamhita (Majumdar, 1935).

Chapters III and IV dealing with plantation refer to several varieties of trees and plants. *Ashota (Solanum erianthum)*, *pista (Pistacia vera)*, *badama (Prunus amygdalus)*, *kharika (Phoenix dactylifera)*, *methi (Trigonella foenum-graecum)*, *sevati (Rosa alba)*, and *seva* (*Malus pumila*) (III-32) are words of non-Sanskrit origin and are obviously borrowed from vernacular languages. This suggests a period when vernacular languages were developed enough to influence Sanskrit compositions.

These hints strengthen or at least do not contradict the fact that the author was a contemporary of king Rana Pratap.

Locale

Regarding the area to which this 16th century author belonged, the text provides clear indications. In the opening verse, the author states that he composed the present text to provide the readers with the knowledge of availability of water and also of plantations of trees, as the latter is entirely dependent on the former. In the following verse, too, the author specifies his approach to the topic of water availability. In other works on the same subject, authors deal with this topic towards the end or after discussing seasons and availability of rainwater in the specific region. Chakrapani is silent on these topics and straight away approaches the subject of groundwater at the very outset. This suggests that water was the primary concern of the author and that he belonged to an area where there were scanty rains and plantation necessarily depended on groundwater. The detailed instructions on constructing wells, ponds, lakes, etc., in the second chapter also suggest that the author belonged to a region that faced acute scarcity of rainwater or river water and had to depend solely on manmade water reservoirs as those in Rajasthan. The information on detecting water in the semi-arid and arid regions of Rajasthan could be useful for other areas with similar agroclimatic regions in India.

In Verse IA 4, the author explains why he dealt with the topic of groundwater currents in the way he did. Including deserts and mountainous regions in addition to the usual arid, wet, and ordinary land-divisions for tracing water currents, is the noticeable point where the author deviates from the accepted pattern. This difference in his approach, according to him, is because the king made a specific request to him to trace groundwater in mountainous regions, as also in deserts. Obviously the king who made such a request was one who ruled a land comprising of mountains and deserts and felt some urgency to bring deserts and hillocks under plantation.

History has it on records that Maharana Pratap had fought his battles with the Mughal ruler Akbar, and his officers, taking shelter in the hilly regions of the Aravalli ranges. He had forbidden farming on level lands and had ordered his farmers to cultivate only hilly regions for providing food to his army and preventing Akbar's army from having an access to the same. It also prevented the Mughals from looting and destroying crops. These circumstances could have prompted the king's specific request.

In Chapter II where the author discusses digging of wells and other water reservoirs, there is a reference to breaking hard rocks that interfered with digging. The area to which the author belonged must be one where negotiating such hard rocky terrain was a specific need. The Aravalli ranges of Rajasthan are among the oldest on the earth and the rock formations therein, one of the toughest.

Chakrapani does not show as much enthusiasm as Surapala does, in treating the topic of pleasure gardens and garden houses. Nor does he discuss in his work as many flower yielding varieties of plants and creepers; but he does not forget to include instructions on making provision for palaces for royal pleasure, while constructing lakes (II-11). This again suggests that water-bodies, in preference to gardens, were considered more pleasurable in the region where the author belonged. Even today Rajasthan is known for its lake palaces.

The discussion above provides sufficient internal evidence to confirm the fact that Chakrapani was a contemporary of Maharana Pratap and flourished under his patronage in the last quarter of the sixteenth century in Mewar.

Salient features

Besides those features incidentally brought out in the foregoing passages, other salient features of this text are discussed.

The first chapter offers varied and interesting information about natural vegetation, topography, soil variations, rock structures and variety of rocks, water availability, animals and insects, conditions of deserts and hilly lands and so on. An interesting geological feature like hot smoke emerging out after digging the ground to a depth of about 14 feet is mentioned in IA 22. In fact, the entire first chapter offers interesting information for topographical and geological study.

The author states that there are nine main groundwater currents gushing into nine directions. The one that gushes upwards is the strongest (IA 5). He also states that the origin of these currents is either in a mountain or at the root of a tree (IA 6).

In other works on the subject, authors generally describe surface indications for groundwater, classifying land into three categories, i.e., arid, wet, and ordinary, to suggest existence of water currents beneath those surfaces. Chakrapani approaches the topic in a different manner. He divides land first into two categories, i.e., level land and mountainous area following the footsteps of 'ancient' writers only. He subdivides level land further into arid, desert, wet, and ordinary and subdivides the mountainous land too, further into arid and wet. He deals elaborately with arid and desert types of level land and very briefly with wetland. Ordinary land is just mentioned by name, as according to him there is no difficulty in spotting groundwater, which is available in it almost everywhere. In case of the mountainous land he treats both the subdivisions, viz., arid and wet quite elaborately. It must be noted here, however, that Chakrapani takes this land division into account only for the purpose of tracing groundwater. At all other places (e.g. III 1) he follows the same threefold division as others do.

- In Verse IE 14 he gives a sort of a conversion formula to 'hyperlink' the water depth in level land with that in mountains.

- In the second chapter the author describes several types of lakes, wells, ponds, etc., giving many detailed

instructions for constructing them. Surapala is silent on this topic. There is also an interesting section here, consisting of fourteen verses (II 22 to 35), that refers to hard rocks coming in the way while digging wells, etc., which needed to be cut with extra sharp iron tools. The author also offers advice for preventing the tools from bending or blunting in the process. Surapala's work does not contain this information.

Verses 7 to 10 of the same chapter contain instructions for construction of huge lakes at low costs by constructing bunds. Although the verses are intended for instructions on lakes, the contents almost suggest a blueprint for construction of dams.

The author seems to have some reservations on the use of animal flesh, blood, etc., in the recipes for nourishment of plants and also in the remedial measures for their diseases. Occasionally one does come across references to bones, marrow, etc., of different animals but cow's flesh or bone is not recommended. In spite of these reservations, the author offers instructions for preparing *kunapa* (a liquid manure prepared from flesh, marrow, and blood of several animals) and unhesitatingly recommends its use for the healthy growth of all varieties of plants (VII 2, 3). This reflects either on the inevitability of the use of *kunapa* for plants or on the rational approach of the author to his subject.

Compared to other works on ancient Indian agriculture and allied subjects, the astrological content in Vishvavallabha is conspicuous by its absence. In spite of his having authored a book like Muhurtamala, Chakrapani desists from recommending any auspicious days, stars, etc., for starting an activity related to plantation. Neither do we find reference to good or bad omens anywhere in the text. This too, may be regarded as a proof for the author's logical/rational approach and scientific attitude. It is only rarely (VII 35, VIII 44) that he recommends some kind of esoteric remedies for growth or disease of a tree. Otherwise even while recommending a mantra to get rid of pests like rats, etc., he advises remedies like getting rid of rat holes and medicines for destroying the pests alongside (VI 3).

The author of this text, unlike others on similar subjects, does not directly advise people to take to plantation of trees by elaborating on the merits and usefulness of trees to mankind. No portion of the text is specifically devoted to glorification of trees. The only exception to this is found when he states that gardens should be laid out in the interest of both the worlds. (III 6)

The work does not refer to the social side of agriculture or plantation, as is the case with other similar texts like Kashyapiyakrishisukti (Ayachit, 2002). The author does not say anywhere in the text that taking up plantation, constructing water reservoirs, providing healthy seeds or stalks for plantation, etc., come under activities of social welfare which the king must pursue in the interest of the subjects.

Thus, nowhere in his text on plant life, Chakrapani directly advises kings on their duties and responsibilities or people

on merits of trees, etc., the subject itself is his primary and sole concern and he has not allowed his mind to divert or deviate from it. Only once (IB 1) he has shown a direct concern for the residents of deserts who, he believes, could have a permanent source of happiness if they were to be educated on how to locate water currents of the size of an elephant's trunk concealed beneath the dry stretches of deserts.

Planting trees inside the forts is yet another new topic that Chakrapani treats with considerable detail (III 28 to 32).

The author makes a passing reference to plants brought from foreign lands but discourages their plantation, as he firmly believes that they cannot survive on alien soil and climate (VIII 7, 8). However, he also knows that if destiny favors, if the rulers and the wealthy offer help and support and if special efforts are put in, a tree can grow in any surroundings. (III 12) Similar thought was expressed by Surapala (Sadhale, 1996).

Chakrapani's treatment of plant disorders is based on the *tridosha* theory like that of Surapala. In fact, Vrikshayurveda (science of plant life), and Ayurveda (science of life), e.g., Hastyayurveda (science of elephant life) and Ashvayurveda (science of horse life) are all branches of one major science, i.e., Ayurveda (science of life). This explains why the experts of Vrikshayurveda like Surapala were often reputed physicians too. The principles underlying the diagnosis and treatment are common to all. According to the *tridosha* theory, disease is imbalance of the three humors and health is the balance thereof. In addition, the fundamental concept of life that the entire creation including humans, animals, and plants are modifications of the five elements, viz., ether, wind, fire, water, and earth automatically establishes a natural, inbuilt ecological link among living beings, plants, their food substances, the three humors, the diseases and the corrective measures. This is why the diseases of trees, animals, humans, etc., and their treatment are essentially the same in many respects.

While stating his prescriptions for protection and treatment of plants, Chakrapani repeatedly says that while other works on similar subjects deal with several prescriptions, he has restricted himself only to those, which have been actually experimented and have yielded results (VIII 78). This shows that in this work he has paid attention not only to the theory but also to the practice of the science of plant life. He also warns that only the experts should practice the remedial prescriptions after using their discretion.

Chakrapani has allowed freedom and flexibility to scholars and planters by advising them to learn from their own observations (IE 15), to use their own reason and discretion as per changes in place and time (VIII 8), to consult local people (VII 45), to take their clues from other texts on the science and from the traditions (IX 51). He thus suggests a path of future development of an applied science like Vrikshayurveda.

The manuscript

A photocopy of the manuscript was procured from Jodhpur (Rajasthan Prachya Vidya Pratishthan) bearing number 5861-22 and title 'Vishvavallabhapatra' (A manuscript of Vishvavallabha). One Lakshminarayana has copied this manuscript in Vikramsamvat 1925, corresponding to shaka 1790. This corresponds with the year 1846/1847 of the Gregorian calendar. Thus the scribe has prepared this copy approximately two hundred and fifty years after its composition. In the colophon to the work the scribe states that he copied this work so that one Shri Bhaktavar could read it. Nothing is known about Bhaktavar or the source text of the scribe. The manuscript in hand contains many blank spaces indicating that the source text/copy itself had those lapses or that the respective portions were badly or illegibly written in it. The script contains several textual and metrical defects too. For most of these, too, either the scribe of the source copy and/or that of the present script were responsible. Many of such clerical errors can be corrected by guess and the context. The manuscript is neatly written in a uniform, legible hand in Devanagari script in a style current in the 19th century. The style of writing or joining some letters is different from that of the current Devanagari. The text comprises of twenty-one pages with thirteen lines on each. Though the form is metrical, it is written in a continuous style like prose without leaving any space between two verses or even between two chapters, for that matter. If not with ease and fluency, the text can still be read with patience and persistence.

The composition

Following the set pattern, Chakrapani has composed this work in a systematic manner by neatly dividing the topics of the subject into nine chapters. Each chapter is devoted to that single topic and this is scrupulously followed although chapters dealing with some topics are too short due to the limited content.

Rarely, the same number is repeated for two consecutive verses and occasionally a verse is not numbered at all. Topics of longer chapters (I, VIII, IX) are further subdivided into smaller sub-topics maintaining continuity in the numbering of verses. The first chapter is the only exception to this. In this, verses in each subtopic are independently numbered. The composition in this chapter is not as compact as in other chapters.

The entire composition is in verse form except the subtopics, which are designated in prose. The writer has very good command on longer meters like Sragdhara, Shardulavikridita, Prithvi, and Mandakranta, which he has frequently used throughout the composition and with special preference in the first chapter. The medium size meters like Indravajra, Upendravajra, Upajati, and Malini are also used intermittently. Comparatively Anushtubh, the common choice of Sanskrit writers, especially in non-literary compositions, is used less frequently. No rule regarding the chapter-wise or topic-wise use of meters is observed. Generally, the choice of meter of every verse is determined by the contents. In spite of choosing the metrical form for a technical subject the composition is on the whole easy and simple. Complicated and

involved constructions are exceptional. Occasionally the writer has used simple compounds. In the first chapter he has liberally used code words for indicating numbers but as the conventions are widely understood, they should not be considered as obstructions to the comprehension of meaning. This being a work on science the writer's main focus is on clarity and precision in expression. We do not find here any poetic flourishes in language. Few Sanskrit writers have resisted the temptation of displaying their poetic abilities; even in non-literary compositions as Sanskrit language itself by nature is most adaptable to grandiose of style and expression. Chakrapani uses direct and simple language, which he is not willing to sacrifice for imposing style or striking expression. The language has, however, its own dignity and maturity.

Like poetry, the writer keeps emotion, too, outside the scope of his composition. When a tree does not respond to any treatment it must be transplanted. The author states this in a matter-of-fact manner. It is interesting to compare him with Surapala, the author of Vrikshayurveda, in this regard. The latter advises planters to establish a sort of emotional rapport and communication with the tree to be transplanted to reduce the impact of transplantation (Verses 85 and 86).

Table. Topics covered in Chakrapani's text

Chapter No.[1]	Topic	No. of Verses
IA	Groundwater	22
IB	,,	12
IC	,,	5
ID	,,	2
IE	,,	16
		57 Total
II	Water reservoirs	39
III	Examination and suitability of ground	35
IV	Propagation and plantation	23
V	Water management	6
VI	Protection and care	9
VII	Nourishment and growth	46
VIII	Diseases and treatment	79
IX	Botanical wonders	52
Total		346 Grand Total

1. Chapter I has five sections.

Brevity and terseness are yet other traits of this composition. As water availability in ordinary or wetland does not pose any difficulty, the writer deals with those topics very briefly in the first chapter (ID 5). He is very conscious of not extending the size of the text unnecessarily (IA 22).

The author has described his own composition as one that would be a source of delight to the learned (IX 52). After going through the text one is inclined to agree with him, as the claim seems more than justified.

A note on the typed text of Vishvavallabha

The manuscript written in the year 1846—47 poses the following difficulties for common readers:

- It is written in the script of Devanagari as was current about 150 years ago.
- Writing of certain characters like 't' as in *katu*, 'dh' as in *dridhi*, etc., is entirely different from their present-day form while that of other consonants like k, r, is also slightly different.
- Many characters which closely resemble each other, like y and p, bh and m, t and n are not clearly and uniformly distinguished from each other.
- Style of writing conjunct consonants considerably differs from that of the present-day script.
- The rules of writing nasal consonants, *anuswaras* (nasal sign) and *avagraha* (the sign similar to the letter's' in English) in coalition of letters are not necessarily observed as they are in a standard Sanskrit text.
- Words, lines, verses, topics and chapters are not properly dissociated as they are today, since in the old handwritten manuscript style, alignment on both left and right was the first and the foremost requirement of a manuscript.
- Due to these above-stated factors, those who have a fairly good knowledge of Sanskrit, along with its grammar and prosody and have read handwritten Sanskrit manuscripts before can read the text but for others it may be a little difficult.
- An attempt therefore has been made to remove these obstacles in the typed script to the extent possible, trying at the same time to be faithful to the text.
- It can be said that barring the limitations of the font, the text is rewritten in the present-day Devanagiri script.
- It is hoped that those readers who wish to refer the contents of the English translation back to the Sanskrit text will be able to do so with the help of this typed text, simplified up to an extent.

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Commentary

Y L Nene[1]

There is substantial evidence to identify the author of Vishvavallabha, Chakrapani Mishra, (henceforth referred to as Chakrapani) as a scholar attached to the court of Maharana Pratap (1540—1597 AD) of Mewar (Udaipur) of Rajasthan in India. An account of his scholarship has been given by Dr Nalini Sadhale elsewhere in this publication. Chakrapani's classic, Vishvavallabha, deals with various aspects of agriculture with a focus on the Mewar region of Rajasthan, which probably include adjacent areas of the present-day Gujarat and Madhya Pradesh. The following topics relate well to the Mewar region: (1) detection of groundwater in arid, semi-arid, and moist regions, and hills; (2) construction of water reservoirs; (3) kinds of soils; and (4) crops to be grown.

Detection of groundwater (I A–E)[2]

The detailed understanding about detection of groundwater based on several criteria clearly points to the increased knowledge-base since the times of Varahamihira (505—587 AD), who lived in the adjacent Malwa region of Madhya Pradesh, Surapala (c. 1000 AD) who lived in eastern India, and Sarangadhara (13th century AD) of Bundelkhand in northeast Madhya Pradesh. It is clear that Chakrapani had access to the information that had existed prior to his time. His reference to the existence of underground artesian well (IA 5) is indicative of detailed observations.

Groundwater in semi-arid, arid, wet, and hilly areas (IA, IB, IC, ID, IE): In all, 57 verses include information on different indicators for the presence of groundwater.

Rocks of different colors and structures have been mentioned as indicators. These are golden (IA 8) *parpata* (layered rock?) (IA 7, 8), pigeon colored (bluish gray) (IA 11), white (IA 13), reddish (IA 15), *putaka* (?) (IA 16), dusty colored (brown) (IA 18), purple (IE 9), lapis lazuli (IE 9), pearly white (IE 9), smoky (IE 9), and silky white (IE 10).

The entire rock system of the hills of Mewar belongs to the metamorphic series of Archaean rocks. Common metamorphic rock types are: schists (green, blue, mica,

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2. Verse nos. are given in parentheses.

graphite, etc), slate and gneiss, marble, and others. Rocks that Chakrapani associated with groundwater must be of the metamorphic series.

Soil colors and types associated with the presence of water are: white sand (IA9, 10), iron-colored (reddish brown) (IA 9, 14), white (IA 9, 12, 13; IB 5), yellow sand (IA 10), brown (IA 12), whitish-red sand (IA 12), smoky (IA 15), black (IA 16, 17, 18), yellow (IA 19; IB 8), sandy blue or sandy black (IE 11), sandy copper (IE 12).

Soil types of Mewar and adjacent regions have been classified by soil scientists today as mixed red and black, red, red and yellow, gray brown, medium black, and alluvial. Soil types mentioned in Vishvavallabha match those that we know today. "White soils" mentioned in the text could be due to subsoil deposits of calcium carbonate.

Fauna associated with groundwater, according to Chakrapani, include termitaria (IA 11 to 19; IB 2 to 4, 7 to 10); mosquitoes (IC 1); earthworms (IB 3); scorpions (IB 5); frogs (IA 9, 13, 16; IB 3); alligators (IA 10); tortoises (IA 18); and snakes (IA 15, 16, 19; IB 10, 12).

It is clear that presence of termitaria visible above soil surface and presence of frogs and snakes below the underground were frequently used indicators of the presence of water. This is logical. Presence of other fauna may also be useful but not a reliable indicator of the presence of groundwater. Indication of the presence of hot springs is noteworthy (IA 22).

Vegetation offered excellent indication of the existence of subsoil water. Numerous species of plants were associated with the quantity, quality and depth of groundwater. Here is a summary.

In semi-arid regions (IA): *arjuna* (*Terminalia arjuna*) (10), *ashmantaka* (*Bauhinia variegata*) (18), *asitadala* (?) (20), *badari* (*Ziziphus mauritiana*) (11, 18), *bharngi* (*Clerodendrum indicum*) (20), *bilva* (*Aegle marmelos*) (13), *danti* (*Baliospermum montanum*) (20), *durva* (*Cynodon dactylon*) (17), *haridra* (*Adina cordifolia*) (19), *jambu* (*Syzygium cumini*) (11), *kakodumbarika* (*Ficus hispida*) (13), *kali* (*Holarrhena antidysenterica*) (14), *kampilla* (*Mallotus philippensis*) (14), *kapittha* (*Limonia acidissima*) (16), *karanja* (*Pongamia pinnata*) (15), *karnikara* (*Pterospermum acerifolium*) (21), *kharjuri* (*Phoenix dactylifera*) (21), *kola* (*Ziziphus mauritiana*) (12, 21), *kusha* (*Desmotachya bipinnata*) (17), *lakshmana* (*Ipomoea sepiaria*) (20), *madhuka* (*Madhuca indica*) (15), *nalikera* (*Cocos nucifera*) (17), *navamallika* (*Jasminum arborescens*) (20), *palasha* (*Butea monosperma*) (12, 21), *rudanti* (*Capparis grandis*) (20), *shona* (*Oroxylum inidicum*) (14), *sinduvara* (*Vitex negundo*) (12), *tala* (*Borassus flabellifer*) (17), *tilaka* (*Wendlandia exserta*) (17), *trivrit* (*Operculina turpethum*) (20), *udumbarika* (*Ficus glomerata*) (9, 13), *vetasa* (*Calamus rotang*) (8).

In arid regions (IB): *badara* (*Ziziphus mauritiana*) (5), *bilva* (*Aegle marmelos*) (6), *durva* (*Cynodon dactylon*) (7), *indra* (*Citrullus colocynthis*) (4), *kakubha* (*Terminalia arjuna*) (6), *karira* (*Capparis desidua*) (2), *karkandhu*

(*Ziziphus mauritiana*) (6), *kusha* (*Desmotachya bipinnata*) (7), *mahanimba* (*Melia azadarach*) (11), *neepa* (*Anthocephalus cadamba* or *Barringtonia recemosa*) (10, 12), *nimba* (*Azadirachta indica*) (9), *palasha* (*Butea monosperma*) (8), *pilu* (*Salvadora persica*) (3, 5, 6), *rohita* (*Tecomella undulata*) (2, 5, 8, 9), *shama* (*Prosopis sp.*) (10), *shami* (*Prosopis cineraria*) (8), *shimpa* (*Dalbergia sissoo*) (12).

Trees such as *rohita* (*Tecomella undulata*) and *pilu* (*Salvadora persica*) have been mentioned more often than others. Both these trees are seen in arid regions of India.

In wetlands (IC): *alindala* (?) (3), *ashuvega* (?) (2), *brahmi* (*Bacopa monniera*) (3), *danti* (*Baliospermum montanum*) (2), *edukivya* (?) (3), *garuda* (?) (2), *gundraka* (*Typha australis*) (3), *jyotishmati* (*Cardiospermum halicacabum*) (2), *kokilasya* (*Hygrophila auriculata*) (3), *lakshmana* (*Ipomoea sepiaria ?*) (3), *mashacchada* (*Vigna* sp) (3), *mashuparni* (*Teramnus labiales ?*) (2), *nala* (*Phragmites karka*) (3), *pindaraka* (*Trewia nudiflora ?*) (3), *rudanti* (*Capparis grandis* and *C.sepieria*) (2), *sharivakha* (*Hemidesmus indicus*) (3), *shiva* (*Prosopis cineraria*) (2), *shyama* (*Ichnocarpus frutescens*) (2), *trivrita* (*Operculina turpethum*) (2), *varahi* (*Dioscorea bulbifera*) (2), *virana* (*Vetiveria zizanoides*) (1), *vyaghrapadi* (*Flacourtia indica*) (2).

We can recognize many of these species to be moisture loving and therefore observation by Chakrapani stands confirmed.

In hilly regions (IE): *arjuna* (*Terminalia arjuna*) (13), *audumbari* (*Ficus glomerata*) (2), *bibhitaka* (*Terminalia bellirica*) (4), *bijapura* (*Citrus medica*) (5), *bilva* (*Aegle marmelos*) (13), *bodhi* (*Ficus religiosa*) (2), *champaka* (*Michelia champaca*) (5), *dadimi* (*Punica granatum*) (5), *dhava* (*Anogeissus latifolia*) (13), *durva* (*Cynodon dactylon*) (14), *jambu* (*Syzygium cumini*) (4, 14), *kharjuri* (*Phoenix dactylifera*) (4), *kubjaka* (*Rosa brunonii*) (5), *kusha* (*Desmostachya bipinnata*) (14), *kutaja* (*Wrightia tinctoria*) (14), *mahanimba* (*Melia azadarach*) (14), *naktamala* (*Cassia fistula*) (4), *nalikera* (*Cocos nucifera*) (6), *neepa* (*Anthocephalus cadamba* or *Barringtonia racemosa*) (4), *nimbaka* (*Citrus limon*) (5), *nyagrodha* (*Ficus benghalensis*) (2), *palasha* (*Butea monosperma*) (2), *partha* (*Terminalia arjuna*) (13), *pichu* (*Azadirachta indica*) (14), *pilu* (*Salvadora persica*) (14), *sarja* (*Vateria indica*) (14), *shaka* (*Tectona grandis*) (13), *shatapatri* (*Rosa centifolia*) (4), *shimshapa* (*Dalbergia sissoo*) (13), *shriparni* (*Gmelina arborea*) (13), *sinduvara* (*Vitex negundo*) (4), *tala* (*Borassus flabellifer*) (6), *udumbarika* (*Ficus glomerata*) (2), *vata* (*Ficus benghalensis*) (4), *vetasa* (*Calamus rotang*) (6).

Most of these plant species are known to be deep rooted and therefore should indicate presence of groundwater.

Contents of verse IE 2 need to be noted. Existence of plenty of water in mountains, not too deep, has been mentioned if a combination of *bodhi* (*Ficus religiosa*), *udumbarika* (*Ficus glomerata*), *palasha* (*Butea monosperma*), and *nyagrodha* (*Ficus benghalensis*) are seen at a location. On the contrary trees such as *arjuna*

(*Terminalia arjuna*), *bilva* (*Aegle marmelos*), *shimshapa* (*Dalbergia sissoo*), and *dhava* (*Anogeissus latifolia*) indicate absence of water (IE 13).

The ecology of the Mewar region of Rajasthan has undergone substantial changes since the time Vishvavallabha was written. However, many of the criteria of detecting groundwater may still be useful in pockets where ecology has not changed significantly.

At a time in history when the technological advances that we see today had not occurred, many of the criteria given in Vishvavallabha must have been most useful in saving the wastage of manual labor that was required for digging wells.

Construction of water reservoirs (II 1–39)

The technology required for the construction of water reservoirs was most advanced in South Asia. This is evident from the texts such as Kashyapiyakrishisukti (c. 800 AD) (Ayachit, 2002).

The technology extended to all regions of the Indian subcontinent and it was very vital for the arid and semi arid Rajasthan to construct water reservoirs.

The verses describe construction of lakes for villages and pleasure resorts for kings, ponds, wells, and potholes. Besides, some verses explain the techniques for breaking rocks and for preventing damage to implements.

There is reference to different shapes of lakes (II 4). To qualify for a good lake its length should be over 1800 m (II 6). A dam constructed between two hills can give rise to a large lake (II 7, 8). Use of mortar in strengthening the bunds of dams is indicated (II 9). Pleasure resorts for kings were constructed in the middle of lakes or on the banks (II 11). Four types of ponds with specific names, viz., *nanda, bhadra, jaya,* and *vijaya* (II 12) were recommended. Seven kinds of wells have been mentioned, viz., *vijaya, dundhubi, chudamani, bhadra, jaya, nanda,* and *shankar*. *Vijaya* is the smallest (approx. 7.3 m diameter) and all other kinds are larger, each by 150 cm in the order mentioned above (II 15). Potholes, where rainwater accumulated naturally were of four kinds, viz., *bhadra, subhadra, parighra*, and *nanda* (II 19). Deepening these potholes to increase water harvesting and strengthening the bunds around with stones and mortar was suggested (II 21). **Worth noting is the verse II 18 wherein Chakrapani states that water of a well located in an inauspicious portion of the land can be used for irrigation; it would not lead to misfortune. A rational attitude indeed!**

Since water from wells was used for drinking, techniques to keep water safe using herbs and other materials were followed. Even brackish, foul, and turbid water was treated (II 36, 37, 38). For treating brackish water *khadira* (*Acacia catechu*) bark, coconut and chalk powder, were used (II 36, 37) for treating foul and turbid water, powders of dried *kakubha* (*Terminalia arjuna*), *musta* (*Cyperus rotundus*), *ushira* (*Vetiveria zizanioides*), and *kanakaphala* (*Commiphora wightii*) and fruits of *dhatri* (*Emblica officinalis*), *kataka*

(*Strychnos potatorum*), *loha* (*Aquilaria malaccansis*), and *rajadana* (*Manilkara hexandra*) were used. For turbidity alone *palashabhasma* (ash prepared by burning the wood of *Butea monosperma*) was recommended.

It may be pointed out that Surapala (c. 1000 AD) had recommended, for treating water in wells, *ushira, mushta, dhatri* (*amlaka*), and *kataka* in addition to *anjana* (*Hardwickii binata*), *naga* (*Mesua ferrea*), and *kosataka* (*Luffa acutangula* or *L. aegyptiaca*). Brihat Samhita by Varahamihira (Bhat, 1981) mentions materials such as antimony and the powder of *bhadramushta* (*Cyperus rotundus*) bulbs, *rajakoshataka* (*Luffa acutangula*), *amalaka*, and *kataka* fruits, for purifying well water. Thus we see that almost the same herbs had been used for improving drinking quality of water from 6th to 16th century AD, and villagers even today use some of the herbs.

Another aspect covered in this chapter is that of breaking rocks. To reduce the manual work, principle of expansion by heat and sudden contraction by cooling with water was adopted intelligently to break rocks (II 25 to 31). Adjuncts were used with water mixed with leaves of trees, fermented gruel, acrid water mixed with grass, raw sugar, natron (native sodium carbonate), turmeric, long pepper, mustard oil, ashes, cow urine, etc., the import of all these adjuncts is not clear. However, tree leaves in water could reduce the splash from the heated rocks. A good deal of this information apparently was taken from Brihat Samhita of Varahamihira (Bhat,1981).

Tools were used to bring rocks to desired shapes and sizes (II 32 to 35). To protect tools from blunting, the metallic portion was treated with materials such as buttermilk, oil, raw sugar, liquor, ash from barley or *kadali*, latex from *arka*, and mixture of *ankola* oil and water. It is worth researching this information.

Soil and plant propagation (III 1–35).

In verses III 1 to 6, Chakrapani has apparently taken information on soil types, color and taste from Surapala's Vrikshayurveda. In verses III 7 through 19, the author again repeats information given by Surapala, except that names of a few more plant species which gave useful products such as fruits, flowers, and medicines are also mentioned.

Verses III 20 to 27 list a number of small and large trees that were not recommended for planting near a residence. The ground rule was to grow only those species, which give useful products such as fruits, flowers, and medicines.

A unique section is on plantation inside a fort (III 28—32). Forts were key locations for the defence of a kingdom as well as the ruler. For the needs of soldiers, it was necessary to erect required infrastructure. This included growing plant species, especially trees of economic importance and flowering shrubs. There is no specific reference to plantations in forts in any of the ancient and medieval texts translated so far.

Planting (IV 1–23)

There is interesting information in this chapter too. Trees that can be grown in a rocky terrain are: *udumbari, tinduka, vira, chincha, vata, rajadana, champaka, vamsha, jambu*, and *pichu*. In soils mixed with mica (these exist in Rajasthan), *rajadana*, *bakula*, and *champaka* will not grow.

Verse 8 suggests that for developing a good garden the land should not be under ripe grass, *mash* (*Vigna mungo*), and *tila* (*Sesamum indicum*). This probably was because of the grain shattering varieties of grasses, *mash*, and *tila*, which could create a continuing weed problem. In the same verse planting of *ajagandha* (*Cleome gynandra*) and *shatapushpi* (*Anethum sowa*) to repel termites was recommended.

As in Surapala's Vrikshayurveda, Chakrapani also mentions (IV 9) making pits for planting trees/shrubs and heating them by fire. While Surapala mentions placing cow bones and cow dung for burning, Chakrapani avoids mentioning bones. The latter simply states that the pits should be heated, filled with soil, and then sown with seed traced with dry cow dung, ghee, honey, and ashes of sesame plants (IV 10).

It is necessary to discuss the "heating" of the pit. Why was this recommendation made since Surapala's time (c. 1000 AD)? There must have been a realization that entities or factors, not visible, but affecting the health of newly planted trees/shrubs must exist and burning organic matter in the pit would eliminate them. It can be conjectured that the existence of soil borne disease causing entities was suspected. Smearing all parts of the transplanted saplings with cow dung was obviously done to protect them from any injury or affliction of biotic origin.

Protection of saplings (VI 1–9)

By and large the contents of this chapter are similar to those in Surapala's Vrikshayurveda. However, we see a few additional points. For example, injury to trees by smoke was recognized by Chakrapani, and he suggested planting trees at a safe distance from source of fire (VI 1—3). This must be one of the early records of polluted air adversely affecting trees. While Surapala depended on mantra for saving plants from damage by rats, Chakrapani suggested both destruction of rat holes as well as writing mantra on a leaf and burying it (VI 3, 4).

An interesting recommendation has been made to control insect pests in young plantings, i.e., to plant *shatapushpa* (*Anethum sowa*) and *kuberakshi* (*Caesalpinia crista*) densely between tree rows. This is in addition to planting *ajagandha* (*Cleome gynandra*) to repel termites as mentioned earlier (VI 8).

Nourishment (VII 1–46)

It seems Chakrapani was somewhat averse to recommending *kunapa* (liquid manure), the constituents of which since the time of Surapala (c. 1000 AD) included

animal bones, flesh, and blood besides other constituents. Vegetarianism (I would like to coin a new word "Vegedarianism" to include plants and dairy products which the so-called vegetarians of India consume) was most prevalent in western India by the time of Chakrapani and that may be the reason for his aversion. Even today Rajasthan and Gujarat have a high percentage of 'vegedarian' population. However, the animal wastes are vital ingredients of *kunapa*, and therefore Chakrapani could not do away with it. In verse 25, Chakrapani suggests a gruel prepared by fermenting *karkandhu* (*Ziziphus mauritiana*), *methi* (*Trigonella foenum-graecum*), *tila* (*Sesamum indicum*), *rodhra* (*Symplocos racemosa*), and curd/buttermilk to induce early flowering. This seems to be an attempt towards a 'vegedarian' *kunapa*. In contrast, Chakrapani seems to have less hesitation in recommending animal wastes in the verses of chapter IX, Wonders of seeds.

Materials recommended for nourishment were similar to those recommended by Surapala but with some modifications. These included milk, ash from *chara (Buchanania lanzan)* washings from rice, powdered mustard (yellow?), white mustard, sesame, oilcakes, fish (meal), ghee, *triphala*, decoction of horse gram (*kulattha*) flour, decoction of cotton (*karpasi*) seed, cattle dung, soaked black gram (*masha*), cock droppings, mixture of several plants in ghee (VII 17 to 19, 21, 34, 40, 44), honey, raw sugar, liquor, barley, *bidanga* (*Embelia ribes*), and a few others. Of course *kunapa* figures in at least 10 verses.

Disorders and treatments (VIII 1–79)

Again Chakrapani has followed texts of Surapala and Sarangadhara (Majumdar, 1935) but with some additions. For example, several new herbs have been mentioned for the control of disorders. Such plant species are: *ambu, aragvadha, arishta, ingudi, karanja, katphala, katvanga, kuberakshi, nimba* bark, *rohita, shatapushpa, tagara, vasa* and others.

Of these *karanja* (*Pongamia pinnata*), *nimba* (*Azadirachta indica*), *shatapushpa* (*Anethum sowa*), and *vasa* (*Adhatoda vasica*) are of interest today especially to entomologists. This must be one of the oldest documented references on the use of these species for insecticidal and antimicrobial properties. It is also worth noting that insecticidal herbs were mixed in cow urine before use (VIII 39, 40). Only recently Khanuja *et al* (2003) patented cow urine distillate in powder form as "bioenhancer" that improves absorption of chemicals in the living systems. It is logical therefore to conclude that mixing herbs in cow urine must have improved their insecticidal properties.

A list of materials recommended for the control of disorders has been given in Table 1.

Chakrapani follows Surapala in classifying (internal) disorders based on the imbalance of humors such as *vata, pitta,* and *kafa*. In Table 2, a comparison of symptoms associated with the imbalance of these three humors or *doshas* as described by Surapala, Sarangadhara,

and Chakrapani has been made. The descriptions are similar with minor differences.

Chakrapani again follows Surapala and Sarangadhara and mentions disorders (external) caused by insect induced wounds, scorching heat, frost, lightning, strong wind damage, and excessive watering. However, Chakrapani adds to the list the causes such as transplanting shock, too many birds, corrosive, acrid, and saline substances, starving, excessive manuring, and overmedication. This information and the addition to the list of herbs clearly points to the increased knowledge-base since the times of Surapala and Sarangadhara.

Significantly Chakrapani points external and internal damage caused by insects. Undoubtedly a reference to borers has been made (VIII 37). Also his observation that insect pests move to trees/plants from soil, water, and a specific manure is important.

Use of neem bark for fumigation (VIII 43) is an early indicator of the recognition of neem's insecticidal properties. We note in the verse VIII 45 the principle of trap cropping.

Another highly significant recommendation is made in verses (VIII) 60 to 61. This is to remove a diseased tree in the midst of healthy trees and changing soil for the diseased tree, if young. In my opinion, this is a strong indication of the knowledge that disorders could be contagious or infectious. Recommendation to change soil is supportive to the opinion.

Wonders of seeds (IX 1–52)

The chapter has verses that describe prescriptions to obtain unexpected results. Such prescriptions include (i) enlarging fruit size by soaking seeds of *kushmanda* (*Benincasa hispida*), *vartaka* (*Solanum melongena*), and *patolaka* (*Trichosanthes cucumerina*) in hog's marrow (IX 6), (ii) enlarging *vartaka* fruit size by treating its seed with honey and ghee and then incubating it in a growing *kushmanda* fruit (IX 7), (iii) producing mango fruits more than once in a year by soaking its seeds in the blood of rabbit and tortoise for 21 days, and then planting them with the sprinkling of milk and water (IX 9), (iv) getting large radishes by sowing seeds in pits in which cow dung and hog bones are burned and then sand is filled (IX 12), (v) making a tree produce flowers all the year round by drenching soil around it with a mixture of dung, *bidanga* (*Embelia ribes*), sugarcane juice and oilcake, (vi) producing dwarf trees by putting barriers in the root zone (IX 14), (vii) producing sweet fruits of banana and grapes (IX 15, 46), (ix) producing desired tree by inserting its seed in another young tree (an unusual graft?) (IX 19), (x) producing a dwarf tree by cutting its trunk and then treating with *kunapa*, salt, honey, ghee, milk, and iron nail (IX 20), (xi) keeping ripened fruits on trees longer (IX 21, 22), (xii) producing fragrant flowers (IX 27, 32, 33, 35, 36), (xiii) changing color of flowers from normally white to golden yellow through soil treatment (IX 31), (xiv) producing seedless fruits (IX 40, 41) (xv) producing colored (blue, red, green, and yellow) cotton (IX 42—45), and (xvi)

producing scented juice from sugarcane (IX 48, 49). Many of these prescriptions are certainly worth-trying.

The Asian Agri-History Foundation has already published English translations with scientific commentaries of Surapala's Vrikshayurveda (Sadhale, 1996) and Dara Shikoh's Nuskha Dar Fanni-Falahat (Razia Akbar, 2000). We can observe two distinct schools on arbori-horticulture. First the Indian knowledge base tracing its development from Atharvaveda through Agnipurana, Brihat Samhita, Surapala's Vrikshayurveda, Upavana-Vinoda to Vishvavallabha, and the other from early Persian and Arab knowledge base leading to Dara Shikoh's compilation. Dara Shikoh included some prescriptions from the Indian school, but depended mostly on the Persian/Arab schools.

Together, Surapala's Vrikshayurveda, Sarangadhara's Upavanavinoda, and Chakrapani Mishra's Vishvavallabha offer us a wealth of prescriptions that could be researched further with the techniques available to us today. Each prescription or a small group of prescriptions could be a thesis topic/topics for research by a postgraduate student in agriculture. It is up to us whether we continue to follow the West all the time or demonstrate originality in research based on our own agri-heritage.

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Table. Materials recommended for the control of tree disorders and their properties as currently known.

Material	Verses	Latin names of plants	Properties
Algae	55		Cooling microenvironment; nutrition; anthelmintic
Ambu	11	*Pavonia odorata*	Antimicrobial
Amla - bark	56	*Emblica officinalis*	Antimicrobial
Amra - bark	12	*Mangifera indica*	Antimicrobial.
Amrita	23	*Tinospora cordifolia*	Antibacterial; antiviral
Ankola	48	*Alangium salviifolium*	Antifungal; antibacterial; anthelmintic
Ankola - oil	47, 49		
Aragvadha	11	*Cassia fistula*	Antimicrobial
Aragvadha - bark	39		
Arishta	22	*Sapindus emarginatus*	Emulsifying property; insecticidal; antibacterial
Arishta - bark	39		
Arjuna - bark	21, 27, 43, 64, 72	*Terminalia arjuna*	Antibacterial
Asana - seed	15	*Pterocarpus marsupium*	Antimicrobial; exudes gum
Ashoka	45	*Saraca asoca*	Antibacterial
Ashvagandha	12, 14	*Withania somnifera*	Antibacterial; anthelmintic; antiviral; antifungal; insecticidal
Atasi	52	*Linum usitatissimum*	Soothing effect due to mucilage; oil absorbed by wood
Ativisha	41	*Aconitum heterophyllum*	Antibacterial; insecticidal
Ayas (iron)	49		Provides iron to trees
Bhallata(ka)/Bhillota	13, 40, 41, 72	*Semecarpus anacardium*	Antiseptic; insecticidal; termite repellent; antifungal; antibacterial; fruits also anthelmintic
Bidanga	26, 29, 40, 46, 49, 58, 74, 75	*Embelia ribes*	Anthelmintic; antibacterial; insecticidal (embelinbenzoquinone)
Bidanga - bark	39, 64		
Cat dung	42		High in Nitrogen (?)
Chara seed	32	*Buchanania lanzan*	Detoxification (?)

continued

Table 1. ***continued***

Material	Verses	Latin names of plants	Properties
Clarified butter (ghee)	18, 26, 30, 33, 34, 42, 44, 46, 48, 56, 59, 64, 65, 68, 72		Saponification after release of fatty acids
Cow dung	46, 48, 58		With urine it is an antiseptic; rich in bacteria which compete with pathogens; good medium for biocontrol agents; beneficial to *Rhizobium* and *Azotobacter*
Cow dung - dried	56		
Cow dung - dry powder	59		
Cow dung - ash	50		Rich in minerals; "anti-insect" properties.
Cow horn	41		Contains keratin, a protein that has 24% cystine, a sulfur-containing amino acid; used for smoking (fumigating) trees
Cow milk	17, 32, 70		Glutamate, leucine, and proline make up 40% total amino acids in milk of all animals; mass rearing of *Trichogramma*; sticker-spreader; growth promoter(?); induces resistance to leaf curl in chili
Cow urine	39, 40, 42		Antiseptic; bioenhancer
Dhartura - leaves	73	*Datura metel*	Insecticidal (?)
Dhava - bark	72	*Anogeissus latifolia*	Bark contains tannins; produces gum which is emulsifier, stabilizer, and thickener
Fish	73		Rich in protein; releases amino acids including proline, which is known to induce systemic resistance to pathogens and other stress factors
Fragrant grasses	74		Insect repellent (?)
Ghana - bark	21	?	?
Goat's dung	12,15		See cow, dung
Goat's urine	12		See cow urine

continued

Table 1. ***continued***

Material	Verses	Latin names of plants	Properties
Guggula	15, 34	*Commiphora wightii*	Antiseptic
Hingu - bark	43	?	?
Hog dung	42		See cow dung
Hog marrow	50		Contains fats and blood; rich in phosphorus
Honey	18, 26, 28,29,30, 33, 46, 48, 51, 52, 54, 56, 59, 68		Antimicrobial; protects wounds in plants and animals; proline present; peptide apidaecin in honey is antibacterial
Ingudi	29	*Balanites aegyptiaca*	Oil antibacterial and antifungal; bark anthelmintic
Ingudi - bark, fruits	44		
Jackal dung	42		Richer in nitrogen than the dung of herbivores and may promote growth of different biocontrol agents
Jambala	18	*Citrus aurantium* var. *bergamia*	Rind yields an antiseptic oil
Kamala - bulb	55	*Nelumbo nucifera*	Mucilage in rhizomes;antifungal; antibacterial.
Kana	14	*Piper longum*	Antibacterial; larvicidal; anthelmintic
Kankata - leaf powder	30	*Abutilon indicum*	Leaves rich in mucilage
Karanja	41	*Pongamia pinnata*	Oil antibacterial and insecticidal
Karanja - bark	39		
Karkandhu - paste	52	*Ziziphus mauritiana*	Soothing effect; antibacterial; antidote to poisons
Karkandhu - seed	32		
Katphala	24	*Myrica esculenta*	Bark extract antiseptic
Katvanga	72	*Ailanthus excelsa*	Anthelmintic; antibacterial
Khadira	22	*Acacia catechu*	Antibacterial; antifungal
Krishna	72	*Piper nigrum*	Oleoresin antibacterial/antifungal; alkaloid piperin is insecticidal

continued

Table 1. *continued*

Material	Verses	Latin names of plants	Properties
Kubera	15	?	?
Kuberakshi	29	*Caesalpinia crista*	Seed oil antimicrobial; leaves and bark anthelmintic
Kulmasha/Kulmashaka	12, 49	*Cassia absus*	Seed antimicrobial and contains mucilage
Kumudvati - flowers	54	*Nymphaea* sp.	?
Kunapa	13, 52, 62, 68		Effects would include: healthy crop/tree; crop tolerance to abiotic stresses such as frost, heat, etc., as well as to insect pests and diseases; high yields; high quality produce
Kushta	74	*Saussurea lappa*	Antiseptic; insecticidal
Madhu/Madhuka	24, 53	*Madhuca indica*	Oilcake insecticidal and piscicidal; contains saponin (mowrin); flowers antibacterial.
Madhuka powder	58		
Marrow	13, 52		Provide phosphorus (?)
Marudbhava	23	*Alhagi pseudalhagi* ?	
Masha	53	*Vigna mungo*	Seed contains phosphorus and iron; ferritins bind polluting minerals
Milk	18, 26, 33, 43, 44, 46, 48, 51—54, 56-59, 64, 65, 68, 72-76		See cow milk
Mud	52, 55		Biocontrol through soil microflora
Mud from borrow pit	47		May possess better cementing properties
Mudga	53	*Vigna radiata*	Sprouting seeds produce antimicrobial phenols (?)
Musta	18, 41, 54	*Cyperus rotundus*	Antibacterial.
Naga	14	*Mesua ferrea*	Seed oil antimicrobial
Nagajihva	54	*Enicostema hyssopifolium*	Antidote to insect bites
Netra	15	*Opuntia elatior* ?	

continued

Table 1. *continued*

Material	Verses	Latin names of plants	Properties
Nimba - bark	21, 43	*Azadirachta indica*	Insecticidal; antibacterial; antiviral; anthelmintic; mildly antifungal
Nimbu	41	*Citrus aurantifolia*	Some antiseptic property
Nirgundika	11, 15, 50	*Vitex negundo*	Leaves insecticidal; antibacterial; seeds anthelmintic
Oil (not specified)	48, 69		Oils from mustard and sesame are biocidal
Oilcake	15		Presence of traces of oil; rich in nitrogen
Padma	51	*Nelumbo nucifera*	?
Padmaka	74	*Prunus cerasoides*	Exudes gum; bark contains flavonones and glycosides
Palasha	45	*Butea monosperma*	Antifungal; anthelmintic; host for several insect pests
Panchashakha - leaves	11	?	?
Pathya	74	*Terminalia chebula*	Antibacterial properties
Pavanari	14	?	?
Plaksha	56	*Ficus lucescens*	Antimicrobial
Plaksha - bark	21, 27, 56		Antimicrobial
Priyangu - bark	72	*Aglaia elaeagnoidea*	Some insecticidal acivity
Rajani	72, 74	*Mallotus philippensis*	Antimicrobial
Rasna	14	*Vanda tesellata*	Antibacterial
Rodhra - bark	74, 75	*Symplocos racemosa*	Antibacterial
Rohisha - oil	23	*Cymbopogon schoenanthus*	Antimicrobial
Rohita	22	*Tecomella undulata*	Antifungal; anti-termite
Rohita - bark	21		
Sahachara	22	*Barleria cristata*	Antiseptic
Saptaparna - bark	21, 39	*Alstonia scholaris*	Anthelmintic; latex sticky; alkaloids present
Sarja	41	*Vateria indica*	Antibacterial
Sarpi/Sarpis	15, 18	*Sansevieria roxburghiana*	Rhizomes mucilagenous

continued

Table 1. ***continued***

Material	Verses	Latin names of plants	Properties
Shatapushpa/Shatapushpika	14, 73	*Anethum sowa*	Dill-apiol synergistic with pyrethrums; anthelmintic
Shepha	15	?	?
Shopha	50	*Anethum sowa*	?
Shri	74	*Nelumbo nucifera*	See *kamala* - bulbs
Siddhartha/Siddharthaka	40, 41, 42, 72	*Brassica alba*	Insect antixenosis; antifungal; acaricidal;
Siddhartha - bark	43		nematicidal; glucosinolate sinalbin "anti-insect" and "anti-nematode"; allyl isothiosinate antifungal
Sinduvara	41	*Vitex negundo*	See *nirgundika*
Sita	17, 18, 34, 54, 56, 75	*Pueraria tuberosa*	Tuber extract antifungal
Sugar	70		Attracts ants that would reduce pests
Sugar - raw	44, 46, 65, 73		
Tagara	74	*Valeriana jatamansi*	Antibacterial; insect repellent
Tarkari - bark	72	*Premna obtusifolia*	Antibacterial
Tila	11, 26, 43, 49, 53, 54, 64, 65, 69, 70, 73, 74, 76	*Sesamum indicum*	Insecticidal and repellent; oil synergistic to pyrethrums; antioxidative
Tila - oil	74		lignins in seed; 17% protein; 800 mg per 100g calcium,
Tila - paste	48, 65		phosphorus, and potassium; 14% iron(ash) - highest
Tila - powder	49		
Trikatu (ginger, black pepper, long pepper)	40	*Zingiber officinale, Piper nigrum, Piper longum*	See *Kana* and *Krishna*
Triphala	29	*Emblica officinalis, Terminalia bellirica, Terminalia chebula*	See *Amla* - bark and *Pathya*
Udumbara/Udumbari - bark	21, 56	*Ficus glomerata*	Contains latex; bark 14% tannin; anti-bacterial (?)

continued

Table 1. *continued*

Material	Verses	Latin names of plants	Properties
Ushira	18, 54, 74	*Vetiveria zizanioides*	Anthelmintic
Vacha	40, 41, 72	*Acorus calamus*	Antibacterial
Vacha - bark	43		
Vasa	22, 23	*Adhatoda vasica*	Antibacterial; antifungal; antiviral; insecticidal; acaricidal; herbicidal
Vasa - bark	21		
Vetasa - bark	72	*Calamus rotang*	Anthelmintic
Vida (medicinal salt)	17		Antimicrobial
Vidanga	41, 72	*Embelia ribes*	See *Bidanga*
Vidanga - bark	43		
Vidari	54, 74	*Pueraria tuberosa*	See *sita*
Vyaghri	22-24	*Solanum surattense*	Antibacterial; antiviral
Yava	53, 73	*Hordeum vulgare*	Decoction of barley is mucilagenous
Yava - powder	68		

Table 2. Description of symptoms in trees based on the imbalance of three humors by three scholars.

Dosha (Humor)	Surapala	Sarangadhara	Chakrapani Mishra
Vata	Trunks thin and crooked with knots; leaf galls; fruits hard, less juicy and sweet; leaf, flower, and fruit drop; leaf yellowing; seen on arid lands.	Trees tall, thin, short, 'sleepless', or partly conscious; no flowering or fruiting.	Trees small, slender, tall, sleepy, and faded; bear no, or very few, flowers or fruits.
Pitta	Leaf yellowing; premature flower, leaf, fruit drop; decay of flowers and fruits; seen at the end of summer.	Trees yellow; twigs drop repeatedly; premature fruiting; cannot bear the heat of the sun.	Trees slender; pale, whitish leaves; dehydrated flowers and branches; unseasonal fruiting; cannot stand heat of the sun.
Kafa	Delayed fruit bearing; leaves pale and smaller; premature and tasteless fruits; oozing without wounds; yellowing; seen in winter or spring.	Leaves and branches very glossy; flowers and fruits well developed; trunks symmetrical, and all parts covered with creepers.	Oily leaves and bark; whitish undersized flowers; slimy and tasteless fruits; new shoots delayed; encircled by creepers.

Appendix

Plant Index

Sanskrit name	Latin name	Chapter (Verse)
ajagandha	*Cleome gynandra* L.	IV 8
akhota	*Juglans regia* L.	IV 13
aksha	*Terminalia bellirica* (Gaertn.) Roxb.	III 9, 21
akshaka	*Ougeinia oojeinensis* (Roxb.)Hochr.	III 14
akshota(ka)	*Aleurites moluccana* (L.) Willd.	III 9; VII 5
alindala	*(?)*	IC 3
amalaki	*Emblica officinalis* Gaertn.	IX 44
ambu	*Pavonia odorata* Willd.	III 8; VIII 11; IX 18, 24, 33, 35, 36, 49
ambuja	*Barringtonia acutangula* (L.) Gaertn.	III 18
amla(ka)/amlaki	*Emblica officinalis* Gaertn.	III 31; IV 20; VII 7, 9; VIII 29, 56
amlika	*Oxalis corniculata* L.	IX 25
amra	*Mangifera indica* L.	III 9, 14; VII 4, 5, 26, 35; VIII 12; IX 2, 9
amrita	*Tinospora cordifolia* (Willd.) Hook.f. & Thomp.	VIII 23
anjana	*Hardwickia binata* Roxb.	IE 9
ankola	*Alangium salviifolium* (L.f.) Wango	III 23; IV 11, 13; VIII 47, 48, 49; IX 2, 3, 8, 10, 11, 15
apamarga	*Achyranthes aspera* L. var. *porphyristachya* Hook.f	II 30, 31
aragvadha	*Cassia fistula* L.	VIII 11, 39
arishta	*Sapindus emarginatus* Vahl.	VIII 22, 39
arjuna	*Terminalia arjuna* (Roxb.)Wight & Arn.	IA 10; IE 13; III 9, 21; VIII 21, 27, 43, 64, 72; IX 23
arka	*Calotropis gigantea* Ait.	II 35; III 24
asana/ashana	*Pterocarpus marsupium* Roxb.	III 9, 14; VII 5; VIII 15
ashmantaka/kanchanara	*Bauhinia variegata* L.	IA 18; IE 6
ashoka	*Saraca asoca (Roxb.)* de Wilde	III 9, 31; IV 22; VII 26, 30, 31; VIII 45
ashota (non-Sanskrit)	*Solanum erianthum* D.Don. (?)	III 32
ashuvega	*(?)*	IC 2
ashvagandha	*Withania somnifera* (L.) Dunal	VIII 12, 14
ashvakarna	*Shorea robusta* Gaertn.f.	VII 17
ashvamara	*Nerium oleander* L.	III 8
ashvattha(ka)	*Ficus religiosa* L.	III 17, 30
asitadala	*?*	IA 20
atasi	*Linum usitatissimum* L.	VIII 52
atimuktaka	*Hiptage benghalensis* (L.) Kurz	III 15

continued

Sanskrit name	Latin name	Chapter (Verse)
ativisha	*Aconitum heterophyllum* Wall.ex Royle	VIII 41
badama	*Prunus amygdalus* Batsch.	IV 13, 20
badari/badara	*Ziziphus mauritiana* Lamk.	IA 11, 18; IB 5; II 27; III 21, 30; VII 23; IX 24
bakula	*Mimusops elengi* L.	III 9, 14, 29; IV 5; VII 31
bandhuka	*Pentapetes phoenicea* L.	III 29
bhallata(ka)/ bhillata/bhillota	*Semecarpus anacardium* L.f	II 26; VII 36; VIII 13, 40, 41, 72
bharngi	*Clerodendrum indicum* (L.) Kuntze	IA 20
bhringaraka	*Eclipta prostrata* (L.)L.	II 33
bibhitaka/bibhitaki	*Terminalia bellirica* (Gaertn.) Roxb.	IE 4; III 23; VII 7; VIII 29; IX 18, 44
bidanga/vidanga	*Embelia ribes* Burm.f.	IV 15; VII 17, 22, 27, 36, 38, 40; VIII 26, 29, 39, 40, 41, 43, 46, 49, 58, 64, 72, 74, 75; IX 13, 16, 17, 18, 21, 46
bijapura/ bijaddhya	*Citrus medica* L.	IE 5; III 15, 21, 31; IV 20; VII 22
bilva	*Aegle marmelos* (L.) Corr.	IA 13; IB 6; IE 13; III 14; VII 5, 21
bimba	*Coccinia grandis* (L.) Voigt.	III 5, 17
bodhi	*Ficus religiosa* L.	IE 2
brahmi	*Bacopa monniera* (L.) Pennell	IC 3
brihati	*Solanum indicum* L.	IX 2
chakra (type of nakha)	see nakha	IX 36
champa	*Artocarpus heterophyllus* Lamk.(?)	IV 20; VII 5
champaka	*Michelia champaca* L.	IE 5; III 7, 9, 14, 15, 29; IV 4, 5, 22; VII 17; IX 29
chandraka	*(?)*	III 17
chara	*Buchanania lanzan* Spreng.	VIII 32
chincha	*Tamarindus indica* L.	II 26; III 9, 14, 21, 30; IV 4, 20
chinchini	*Tamarindus indica* L.	IX 24
chuta	*Mangifera indica* L.	VII 28
dadimi/dadima	*Punica granatum* L.	IE 5; III 9, 17, 31; IV 20; VII 6, 7, 8, 35; VIII 38
dala tree	*(?)*	IX 5
danti	*Baliospermum montanum* (Willd.) Muell.-Arg.	IA 20; IC2
dhartura (dhattura)	*Datura metel* L.	VIII 73
dhatri	*Emblica officinalis* Gaertn.	II 37; III 10; VII 26
dhava	*Anogeissus latifolia* (DC.) Wall.ex Bedd.	IE 13; II 26; III 10; VIII 72; IX 32
draksha	*Vitis vinifera* L.	III 17, 33; VII 16; IX 46
durva	*Cynodon dactylon* (L.) Pers.	IA 17; IB 7; IE 14, 15

continued

Sanskrit name	Latin name	Chapter (Verse)
edukivya (?)	*(?)*	IC 3
ela	*Elettaria cardamomum* Maton	III 18; IX 33, 36
eranda	*Ricinus communis* L.	III 23; IX 25
garuda	*(?)*	IC 2
ghana	*Cyperus rotundus* L. (?)	VIII 21; IX 27, 33, 36
guduchi	*Tinospora cordifolia* (Willd.) Hook.f. & Thomp.	II 30, 31
guggula	*Commiphora wightii* (Arnott) Bhandari com. nov.	VIII 15, 34
gulala	*(?)*	III 16, 29
gundraka	*Typha australis* Schum.& Thonn.	IC 3
gunja	*Abrus precatorius* L.	VII 17; IX 41
hanu (type of nakha)	see nakha	IX 36
haridra	*Curcuma domestica* Val.	VII 17; IX 45
haridra tree	*Adina cordifolia* (Roxb.) Hook. F. ex Brandis	IA 19; III 21
harital	*Cynodon dactylon* (L.) Pers.	IV 8
haritaki	*Terminalia chebula* Retz.	VII 7; VIII 29; IX 18, 44
hayari	*Thevetia peruviana* (Pers.) K. Schum.	IX 27
hemasumana	*Michelia champaca* L.(?)	III 29
hingu(lu)	*Ferula assafoetida* L.	VIII 43; IX 31
indra	*Citrullus colocynthis* (L.) Kuntze	IB 4
indrabija	*Citrullus colocynthis* (L.) Kuntze	VII 36
ingudi(ka)	*Balanites aegyptiaca* (L.) Delile	III 10; VIII 29, 44
jambala	*Citrus aurantium* L. var. *bergamia* Risso	VII 26; VIII 18
jambira/jambhira	*Citrus limon* (L.) Burm.f.	III 15, 31
jambu	*Syzygium cumini* (L.)Keels	IA 11; IE 4, 14; II 26; III 8, 14, 21, 31; IV 4; VII 26
japa	*Hibiscus rosa-sinensis* L.	III 16, 29
jata	*Nordostachys jatamansi* (D.Don) DC.	IX 36
jati	*Jasminum grandiflorum* L.	IE 5; III 16; IV 22; IX 35, 36, 38
jatila	*Nordostachys jatamansi* (D.Don) DC.	III 30
jaya	*(?)*	IX 33
jivantika	*Tinospora cordifolia* (Willd.) Hook.f. & Thomp.	IX 42
jyotishmati	*Cardiospermum halicacabum* L.	IC 2
kadali	*Musa paradisiaca* L.	II 34; VII 29, 37; IX 15
kadamba	*Anthocephalus cadamba* (Roxb.) Miq.	IE 14; III 31; VII 25
Kaila	*(?)*	III 32
kakodumbarika/ kaka-udumbari	*Ficus hispida* L.f.	IA 13; IE 4

continued

Sanskrit name	Latin name	Chapter (Verse)
kakubha/arjuna	*Terminalia arjuna* (Roxb.)Wight & Arn.	IB 6; IE 13; II 37
kala	*Rubia cordifolia* L. sensu Hook.f. (?)	III 31
kali	*Holarrhena antidysenterica* (L.) Wall.ex DC	IA 14
kamala	*Nelumbo nucifera* Gaertn.	III 15, 31; VIII 55
kamalakha	*(?)*	VII 26
kampilla	*Mallotus philippensis* (Lamk.) Muell.-Arg.	IA 14
kamu	*Emblica officinalis* Gaertn.	III 14
kana	*Piper longum* L.	II 29; VIII 14
kanakaphala	*Commiphora wightii* (Arnott) Bhandari com. nov.	II 38
kanavira (karavira)	*Nerium oleander* L.	III 29; IX 1
kanchanara	*Bauhinia variegata* L.	IE 6; III 14, 21
kanda	*Amorphophallus campanulatus* (Roxb.) Bl.ex Dcne.	IX 33
kankata	*Abutilon indicum* (L.) Sweet	VIII 30
kanta	*Porana paniculata* Roxb.	III 5
kantakari	*Solanum surattense* Burm.f.	IB 4
kapali	*Embelia ribes* Burm.f.	IX 32
kapittha	*Limonia acidissima* L.	IA 16; III 14, 30, 33; VII 21
karabha	*Echinops echinatus* Roxb. (?)	III 10
karaha	*Randia spinosa* Poir.	III 30
karaka	*Capparis decidua* (Forsk.) Edgew	III 30
karalla(karavella ?)	*Hemidesmus indicus* (L.) Schult.(?)	IX 3
karamardaka/karamardaki	*Carissa carandas* L.	III 15, 30, 33
karanja(ka)	*Pongamia pinnata* (L.) Pierre	IA 15; III 21; VIII 39, 41
karira	*Capparis decidua* (Forsk.) Edgew	IB 2, 6
karkandhu	*Ziziphus mauritiana* Lamk.	IB 6; VII 25; VIII 32, 52
karkarika	*(?)*	IX 23
karni	*Citrus karna* Raf. (?)	III 15, 29; IV 20
karnikara	*Pterospermum acerifolium* Willd.	IA 21; III 15
karpasi(ka)	*Gossypium herbaceum* L.	VII 8, 23; IX 30, 42, 43, 44, 45
karpuraharidra	*Curcuma amada* Roxb.	IX 45
kasa/kasi	*Saccharum spontaneum* L.	IX 25, 45
kataka	*Strychnos potatorum* L.f.	II 37
katphala	*Myrica esculenta* Buch.-Ham. Ex D.Don	VIII 24
katvanga	*Ailanthus excelsa* Roxb.	VIII 72
kauksha	*(?)*	VIII 13
keshara	*Mammea longifolia* Planch. & Triana	VII 17

continued

Sanskrit name	Latin name	Chapter (Verse)
ketaka/ketaki	*Pandanus odoratissimus* L.f.	III 8, 16, 29; VII 33
khadira	*Acacia catechu* (L.f.) Willd.	II 26, 36, 38; III 10; VIII 22; IX 32
kharika	*Phoenix dactylifera* L.	IV 13
kharjuri/kharjura	*Phoenix dactylifera* L.	IA 21; IE 4; III 30; IV 13; VII 5
kimshuka(m)	*Butea monosperma* (Lamk.)Taubert	III 29; IX 23, 30
kodrava tree (?)	*Paspalum scrobiculatum* L.	VII 20
kokilasya	*Hygrophila auriculata* (Schum.) Heine	IC 3
kola	*Ziziphus mauritiana* Lamk.	IA 12, 21; III 9; VII 27, 30, 42; IX 25
koshataki	*Luffa acutangula* (L.) Roxb.	VII 19
krishna	*Piper nigrum* L.	VII 17, 19;VIII 72
kshiri	*Manilkara hexandra* (Roxb.) Dubard	III 14
kubera	*(?)*	VIII 15
kuberakshi	*Caesalpinia crista* L.	VI 5; VIII 29
kubja/kubjaka	*Rosa brunonii* Lindl.	IE 5; III 16, 29
kulattha	*Dolichos uniflorus* Lam.	II 27; VII 8; IX 23
kulmasha(ka)	*Cassia absus* L.	VIII 12, 49
kumkum	*Crocus sativus* L.	III 18
kumuda	*Nymphaea nouchali* Burm.f.	IX 1, 11
kumudvati	*Nymphaea* sp.	VIII 54
kunchika	*Nigella sativa* L.	IX 18
kunda	*Jasminum multiflorum* (Burm.f.) Andr.	III 16, 29
kunduru	*Boswellia serrata* Roxb. Ex Colebr.	IX 29
kurabaka	*Barleria cristata* L.	III 29
kusha	*Desmostachya bipinnata* (L.) Stapf	IA 17; IB 7; IE 14
kushmanda(ka)	*Benincasa hispida* (Thunb.) Cogn.	IX 6, 7, 37
kushta	*Saussurea lappa* C.B.Clarke	VII 40, 44; VIII 74; IX 32, 33, 36, 40, 44
kutaja	*Wrightia tinctoria* R. Br.	IE 14
lakshmana	*Ipomoea sepiaria* Roxb. (?)	IA 20; IC 3
lakucha	*Artocarpus lakoocha* Roxb.	III 8, 32; IV 20; VII 5, 26;27
loha	*Aquilaria malaccansis* Lamk.	II 37
machakunda	*Pterospermum canescens* Roxb.	III 29
madhuka/madhu	*Madhuca indica* J.F.Gmel.	IA 15; III 8, 9, 14; VII 5, 19, 20, 21, 27, 44; VIII 24, 53, 58; IX 2, 16, 40, 41
mahanimba	*Melia azedarach* L.	IB 11; IE 14; III 9
malati	*Jasminum grandiflorum* L.	III 29
malika (nava.)	*Jasminum* sp.	IA 20

continued

Sanskrit name	Latin name	Chapter (Verse)
malli(ka)	*Jasminum sambac* (L.) Ait.	III 16;VII 39; IX 35
malura	*Aegle marmelos* (L.) Corr.	III 30
mandara	*Erythrina variegata* L. *orientalis* (L.) Merr.	IX 37
manjishtha/manjishtika	*Rubia cordifolia* L. sensu Hook.f. (?)	IX 31, 42
marudbhava (*marutsambhava)*	*Alhagi pseudalhagi* (Bieb.) Desv. (?)	VIII 23
masha	*Vigna mungo* (L.) Hepper	IV 8; VII 9, 24, 32, 39; VIII 53
mashacchada	*Vigna* sp.	IC 3
mashuparni (?)	*Teramnus labialis* Spreng.(?)	IC 2
masi (mansi?)	*Nardostachys jatamansi* (D.Don) DC.	IX 33
methi	*Trigonella foenum-graecum* L.	VII 25
mridvi	*Vitis vinifera* L.(?)	III 32; IV 22
muchakunda	*Pterospermum canescens* Roxb.	III 8
mudga	*Vigna radiata* (L.) Wilczek	VIII 53
mulaka	*Raphanus sativus* L.	IX 12
munidru	*Sesbania grandiflora* (L.) Poir.	III 17
musta	*Cyperus rotundus* L.	II 37; VIII 18, 41, 54; IX 49
naga	*Mesua ferrea* L.	VIII 14
nagajihva	*Enicostema hyssopifolium* (Willd.)Verdoorn	VIII 54
nakha (shell of land snail?)	*(?)*	IX 33, 35
naktamala	*Cassia fistula* L.	IE 4
nala	*Phragmites karka* (Retz.) Trin. Ex Steud.	IC 3; II 30, 31
nalikera/nalikeri	*Cocos nucifera* L.	IA 17; IE 6; III 14, 31; IV 12, 13; VII 5
naringa/naranga	*Citrus aurantium* L.	III 15, 31; VII 24
navamallika	*Jasminum arborescens* Roxb.	III 16
neepa (nipa)	*Anthocephalus cadamba* (Roxb.) Miq./ (?) *Barringtonia racemosa* (L.) Spreng (?)	IB 10, 12; IE 4
nemali(nepali or nevali?)	*Ixora arborea* Roxb. Ex Sm.	IX 35
netra	*Opuntia elatior* Mill. *(?)*	VIII 15
nili(ka)	*Indigofera articulata* Gouan	III 23; IX 45
nimba	*Azadirachta indica* A. Juss.	IB 9; II 30, 31; III 9; IV 22; VII 17; VIII 21, 43
nimbaka	*Citrus limon* (L.) Burm.f.	IE 5
nimbu(ka)	*Citrus aurantifolia* (Christm.) Swingle	III 15, 30; VIII 41; IX 24
nirgundika	*Vitex negundo* L.	VIII 11, 15, 50
nirmalika	*Strychnos potatorum* L.f.	III 29
nisha	*Curcuma domestica* Val.	II 29; IX 30, 42, 43, 44, 45

continued

Sanskrit name	Latin name	Chapter (Verse)
nuta	*(?)*	III 30
nyagrodha	*Ficus benghalensis* L.	IE 2
padma	*Nelumbo nucifera* Gaertn.	VIII 51
padmaka	*Prunus cerasoides* D.Don	VIII 74
palala	*(?)*	VII 18
palasha	*Butea monosperma* (Lamk.)Taubert	IA 12, 21; IB 8; IE 2; II 26; III 10, 17, 21; IV 14; VIII 45; IX 29, 43
panasa/panasha	*Artocarpus heterophyllus* Lamk.	III 14, 30; VII 5, 18
panchashakha	*(?)*	VIII 11
panduraga	*Artemesia sieversiana* Ehrh. Willd	III 15
pankaja	*Nelumbo nucifera* Gaertn.	VII 32
paravata	*Grewia subinaequalis* DC	III 33
partha	*Terminalia arjuna* (Roxb.)Wight & Arn.	IE 13; IX 24, 25
patala	*Stereospermum personatum* (Hassk.) Chatt.	III 9, 30; VII 23
pathya	*Terminalia chebula* Retz.	VIII 74
patola(ka)	*Trichosanthes cucumerina* L.	IX 6
pavanari	*(?)*	VIII 14
pavasa (palasha ?)	*Butea monosperma* (Lamk.)Taubert	IE 14
phalini	*Lagenaria siceraria* (Molina)Standley (?)	IV 22
phirasa	*(?)*	III 30
pichu	*Azadirachta indica A. Juss.*	IE 14; IV 4
pilu	*Salvadora persica* L.	IB 3, 5, 6; IE 14
pindaraka	*Trewia nudiflora* L. (?)	IC 3
pippala	*Ficus religiosa* L.	III 9, 25
pippali	*Piper longum* L.	VIII 40
pista (non-Sanskrit)	*Pistacia vera* L.	III 32
pitika	*Curcuma domestica* Val. (?)	III 18; VII 23
plaksha	*Ficus lucescens Blume* (F. lacor Buch.-Ham.)	III 17, 25; VIII 21, 27, 56
priyala	*Buchanania lanzan* Spreng.	VII 4
priyangu	*Aglaia elaeagnoidea* (Juss.) Benth.	VII 17, 25; VIII 72
puga	*Areca catechu* L.	III 30; IV 12, 13
punnaga	*Calophyllum inophyllum* L.	III 7, 14; IV 22; VII 25
rajadana(ka)	*Manilkara hexandra* (Roxb.) Dub	II 37;III 7, 31; IV 4, 5, 20
rajani(ka)	*Mallotus philippensis* (Lamk.) Muell.-Arg.	III 10; VIII 72, 74
raji	*Brassica nigra* (L.) Koch	IX 18
rambha	*Musa paradisiaca* L.	III 8, 19, 31

continued

Sanskrit name	Latin name	Chapter (Verse)
rasala	*Mangifera indica* L.	III 30; IV 20
rasna	*Vanda tesellata* (Roxb.) Hook. Ex G.Don	VIII 14
rishabhi	*Mucuna pruriens* (L.) DC	IX 25
rodhra	*Symplocos racemosa* Roxb.	VII 25, 26; VIII 74, 75; IX 30
rohisha	*Cymbopogon schoenanthus* (L.) Spreng.	VIII 23
rohita(ka)	*Tecomella undulata* (Smith) Seem.	IB 2, 5, 8, 9; III 30; VIII 21, 22
rudanti	*Capparis grandis* L.f.; *C. sepieria* L.	IA 20; IC2
sadaphala	*Citrus* sp.	III 15, 31
sadara	*(?)*	II 26
sahachara	*Barleria cristata* L.	VIII 22
sanjirika	*(?)*	III 30
sankola/ankola (?)	*Alangium salviifolium* (L.f.)	II 35
saptaparna	*Alstonia scholaris* (L.) R. Br.	III 10; VIII 21, 39
sarja	*Vateria indica* L.	IE 13; VIII 41
sarpi(s)	*Sansevieria roxburghiana* Schult.f	VIII 15, 18
sarshapa	*Brassica campestris* L. var. *sarson* Prain	IV 11; VII 5
seva	*Malus pumila* Mill.	III 15
sevati	*Rosa alba* L. (?)	III 29
shaka	*Tectona grandis* L.f.	IE 13; III 10
shala	*Shorea robusta* Gaertn.f.	III 30
shallaki	*Boswellia serrata* Roxb. Ex Colebr.	III 10
shama	*Prosopis* sp.	IB 10
shami	*Prosopis cineraria* (L.) Druce	IB 8
shara/sara	*Erianthus munja* (Roxb.) Jesw.	II 28, 38
sharivakha	*Hemidesmus indicus* (L.) Schult.	IC3
shatapatri	*Rosa centifolia* L.	IE 4; III 32
shatapushpi(ka)/ shatapushpa	*Anethum sowa* Kurz.	IV 8; VI 5; VIII 14, 73
shepha	*(?)*	VIII 15
shephalika	*Cassia fistula* L.	VII 23
shigruka	*Moringa oleifera* Lam.	III 9
shikhandi	*Jasminum officinale* L.	III 16
shimpa/shimshapa	*Dalbergia sissoo* Roxb.	IB 12; IE 13
shipha	*Anethum sowa* Kurz.	VII 19
shirisha	*Albizia lebbeck* (L.) Benth.	II 26; IV 22
shiva/shivani	*Prosopis cineraria* (L.) Druce (?)	IC 2; III 10

continued

Sanskrit name	Latin name	Chapter (Verse)
shleshmata	*Cordia dichotoma* var. *wallichii* (Cl.) Maheshwari	III 21
shona	*Oroxylum indicum* (L) Benth. Ex Kurz	IA 14
shopha(ka?)	*Anethum sowa* Kurz.	VIII 50
shri	*Nelumbo nucifera* Gaertn.	VIII 74
shrikhandi(ka)	*Santalum album* L.	III 8, 17, 29
shringavera	*Zingiber officinale* Rosc.	III 18
shriparni	*Gmelina arborea* L.	IE 13
shyama	*Ichnocarpus frutescens* (L.) Ait. & Ait.	IC 2; III 15
siddhartha(ka)	*Brassica alba* (L.) Koch	II 30, 31; III 23; VII 17, 37, 43; VIII 40, 41, 42, 43, 72
sindurika	*Bixa orellana* L.	III 29
sinduvara	*Vitex negundo* L.	IA 12; IE 4; III 17, VII 39; VIII 41
sira	*Citrus aurantium* L.	IX 25
sita	*Pueraria tuberosa* (Roxb. Ex Willd.)DC (?)	VIII 17, 18, 34, 54, 56, 75; IX 40
snuhi	*Euphorbia neriifolia* auct. Pl. non L.	III 17
sriphala (shriphala)	*Aegle marmelos* (L.) Corr.	II 38;III 30
sunthi	*Zingiber officinale* Rosc.	VII 40
surana	*Amorphophallus campanulatus* (Roxb.) Bl.ex Dcne.	III 18
surataru	*Cedrus deodara* (Roxb.) Loud. (?)	III 10; VIII 74
tagara	*Valeriana jatamansi* Jones	VIII 74; IX 33, 35
tala	*Borassus flabellifer* L.	IA 17; IE 6; III 14, 30
tambulika/tambula	*Piper betle* L.	III 16, 32
tapodhana	*Sphaeranthus indicus* L.	IX 25
tarala	*(?)*	III 16
tarkari	*Premna obtusifolia* R.Br.	VIII 72
taruni	*Jasminum flexile* Vahl	III 16
tila	*Sesamum indicum* L.	IV 8, 10; VII 5, 17, 23, 25, 26, 27, 38, 39; VIII 11, 26, 43, 48, 49, 53, 54, 64, 65, 69, 70, 73, 74, 76; IX 39, 42, 43, 45
tilaka	*Wendlandia exserta* (Roxb.) DC	IA 17; III 14; VII 31
tinduka	*Diospyros melanoxylon* Roxb.	II 30, 31; III 10; IV 4; VII 4
tinduki	*Diospyros exsculpta* Buch.-Ham.	II 26
trinadru	*(?)*	VII 29
trinaraja	*Cocos nucifera* L.(?)	IV 13
trivrit(a)	*Operculina turpethum* (L.) Silva-Manso	IA 20; IC2
udumbari/udumbara udumbarika/audumbari	*Ficus glomerata* Roxb	IA 9, 13; IE 2, 4, 9; III 9, 25, 30; IV 4; VIII 21, 56; IX 41

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Sanskrit name	Latin name	Chapter (Verse)
unmatta	*Datura metel* L.	VII 39
ushira	*Vetiveria zizanioides* (L.) Nash	II 37; VIII 18, 54, 74; IX 27, 33, 35, 36, 49
vacha	*Acorus calamus* L.	VII 17, 18, VIII 40, 41, 72; IX 45
vaikankata	*Gymnosporia spinosa* Merr. & Rolfe	VIII 30
vamsha	*Bambusa arundinacea* (Retz.) Willd.	III 10, 17, 30, 33; IV 4
vanjulaka	*Salix tetrasperma* Roxb.	II 26
varahi	*Dioscorea bulbifera* L.	IC 2; IX 18
vartaka	*Solanum melongena* L.	IX 6, 7
vasa	*Adhatoda vasica* Nees	VIII 21, 22, 23
vasantika	*Jasminum officinale* L.	III 29
vata	*Ficus benghalensis* L.	IE 4; III 9, 17, 25, 30; IV 4
vatarika	*Allium sativum* L. (?)	VII 39
vetasa	*Calamus rotang* L.	IE 6; VIII 72
vidama	*Prunus amygdalus* (?)	III 15, 32
vidari(ka)	*Pueraria tuberosa* (Roxb. Ex Willd.)DC	III 18; VIII 54, 74; IX 28
vira	*Terminalia arjuna* (Roxb.)Wight & Arn.	IV 4
virana	*Vetiveria zizanioides* (L.) Nash	IC 1
vyaghrapadi	*Flacourtia indica* (Burm.f.) Merr.	IC 2
vyaghri	*Solanum surattense* Burm.f.	VIII 22, 23, 24
yashti (yashtimadhu)	*Glycyrrhiza glabra* L.	VII 23, 44; IX 16, 17, 40, 45
yava	*Hordeum vulgare* (L.) emend. Bowden	VII 36, 38, 39; VIII 53, 68, 73; IX 16, 39, 42, 43, 46
yuthika	*Jasminum auriculatum* Vahl.	III 29; IX 33